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LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;

NOW IN COURSE OF DELIVERY AT THE THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.

BY

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Inflammation considered as a curative means. Examples shown in apoplexy, and in the formation of artificial anus. Dupuytren's treatment of artificial anus. New operation for the treatment of prolapsus uteri described. Report of the Royal Academy of Medicine on the operation. Cure of nævus. Good effects of adhesive inflammation in the obliteration of nævus. Examples of cure rapidly obtained by this means. Advantages of this mode of operating over excision and the ligature. Explanation of the operation. The erectile tissue is replaced by the solid tissue of organised lymph.

GENTLEMEN:—I now introduce to your notice a final topic connected with the subject of inflammation: it is that of,

XV. *Inflammation as a Curative Means.*

Without inflammation the art of surgery could not exist. Every operation implies the resources of Nature in healing divided parts. This is accomplished by the immediate adhesion of contiguous surfaces, *union by the first intention;* or by the gradual filling up of cavities, *granulation.*

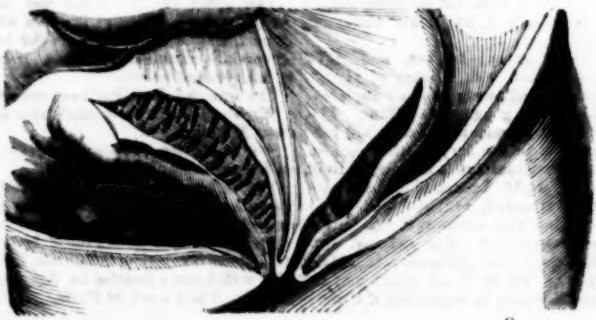
Inflammation, as a curative measure, is sometimes employed by Nature, sometimes by Art.

A coagulum of blood is formed in the substance of the brain, in *apoplexy:* in the first place, albumino-fibrine is thrown out, forming a cyst which lines the torn cavity of the cerebrum, and inclosing the coagulum; in the next place, the coagulum may be gradually absorbed, leaving a cyst replete with serum; in the third place, this serum may be absorbed, the parietes of the cyst approach, adhere, and the cyst is obliterated, nothing but a cicatrix remaining.

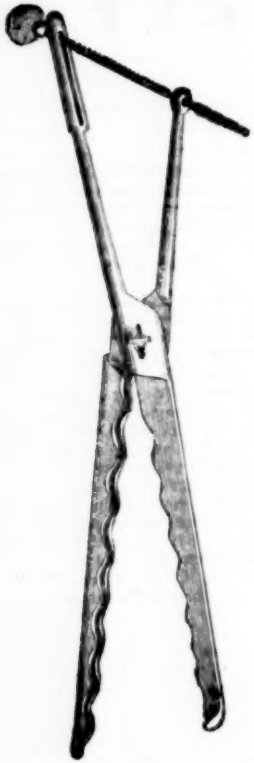
I have already noticed the operations of Nature, in conducting the pus of hepatic abscess to the surface, and in ultimately discharging it from the system.

Another fact, of equal interest, is that of Nature's operations in the formation of *preternatural anus:* the peritoneum lining the abdomen, and the peritoneum covering the intestine, unite by layers of effused albumino-fibrine; the strangulated portion of the intestine sloughs, but the abdominal cavity is safe; the patient is not destroyed; but he is left a prey to a loathsome malady. We shall see how Art, guided by Genius, completes what Nature had begun.

The cure of artificial anus was devised by Dupuytren. The state of the intestine, in that affection, is thus represented by that distinguished surgeon:



The instrument by which Dupuytren contrived to effect the cure, is portrayed in the subjoined woodcut:



It will be observed that one of the blades of this instrument is received into a groove in the other; its edge is dull, indeed one line in breadth, so that the intestine is held and *crushed*, not *severed*, when seized by it. The first blade is passed into the upper, the second into the lower portion of the intestine, and it is gradually but firmly closed. The adjacent parts of the peritoneum *unite* by albumino-fibrinous exudation; the textures seized by the instrument *slough*; the cavity of the abdomen is preserved entire, whilst the canal of the intestine is made continuous. The external wound is healed when the passage of the fæces has become free. All this is admirable.

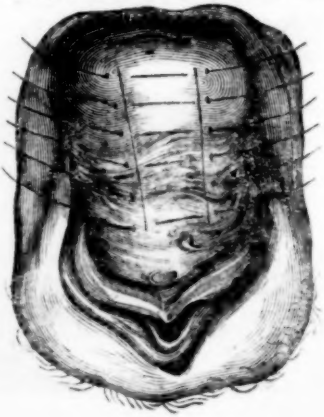
The cure of hydrocele is effected by changing the form of inflammation in the tunica vaginalis, from that which pours out serum to that which pours out lymph. Sometimes the cavity is obliterated by adhesions; sometimes its internal surface is changed by the deposit of lymph, or in the condition of the vessels. This change is induced by some proceeding which excites a higher degree of inflammation; by an injection, by a seton, by removing a portion of the peritoneum, &c.

It has sometimes occurred that, for want of inflammation, the broken extremities of bone, in the case of fracture, have not united. It is then usual to excite this action by means of a seton, or other similar measure.

Cure of Prolapsus Uteri.

Another application of the principles of inflammation to the cure of a distressing malady, was proposed by myself, and successfully made by Dr. Heming. The object was to cure *prolapsus uteri*. It occurred to me that this might be accomplished by diminishing the calibre of the vagina, so that the uterus might be supported in its place at its upper part. The vagina, being lined by mucous membrane, could not be readily excited to contract adhesions with itself; I proposed, therefore, to remove one or two slips of that membrane, and draw the opposite edges into contact by suture; adhesion would take place, the canal would be firmly contracted, and the prolapsus of the uterus prevented. All this was effectually accomplished in one case, the details of which I published some time ago. Several years afterwards, the case was examined by Mr. Vincent; the uterus was still retained in its proper position. Recently this operation has been successfully repeated by M. Velpeau and M. Bérard, jun. In the young, I would propose that the slip of mucous membrane removed from the highest part of the vagina be broader than that removed from below.

The object, in this operation, is to contract the vagina. It is accomplished by changing a mucous surface, opposed to ad-



hesive inflammation, into a surface of another character, on which this form of inflammation is readily excited.

The mode of performing this operation is represented in the subjoined sketch.

The first case of this operation was published so long ago as 1831. The subject of the case was a poor woman, whose bread depended upon the labour of her hands. Her sufferings, from the prolapsed state of the uterus, were often extreme, and she was frequently disabled from engaging in her various occupations.

For several years there had been complete prolapsus of the uterus; to this were also conjoined a partial descent of the bladder at the anterior, and of the rectum, formed into a pouch, at the posterior part of this prolapsus. The os uteri protruded at least two inches beyond the os externum.

It occurred to me, that, if the canal of the vagina could be considerably, permanently, and firmly reduced in its diameter, the uterus would be supported in its place, and prevented from resuming its prolapsed situation; and that this might be done by removing a portion of its mucous membrane along the anterior part, and by bringing and returning the denuded surfaces in contact, by successive deep sutures, until they should unite by cicatrix.

This operation was performed by Dr. Heming. The uterus being protruded as much as possible by the efforts of the patient, two parallel incisions were made through the mucous membrane, from which the sides of the os uteri, along the course of the protruded vagina, to the os externum, the portion of this membrane situated between these incisions, was then removed, leaving a space of one inch and a half in breadth, and of the entire length of the vagina, completely denuded. A suture was then inserted near the os uteri. This suture being tightened, the os uteri was obviously pushed upwards. A second, a third, and other ligatures, were then inserted in the same manner, at short intervals, to the os externum; each ligature, on being tightened, moving and supporting the os uteri upwards.

This operation was attended with little pain; the only sensitive parts of the membrane being those near the os uteri and os externum.

The patient was directed to keep quiet in bed. The bowels had been opened. An opiate was given. No pain or fever followed. In four or five weeks the denuded parts had firmly united, and, shortly afterwards, the ligatures came away.

On examination, six, eight, and ten weeks after the operation, the os uteri could be just felt, *in situ*, by the finger passed through the vagina; the vagina was firmly contracted along its whole course.

The prolapsus of the uterus was thus completely remedied. The descent of the pouch of the rectum was lessened.

The principle upon which this case was treated, is illustrated by a fact detailed to me by Dr. Holland, of Queen-street, May-Fair. A pessary, introduced in a young person to support the uterus, subject to be completely prolapsed, induced great inflammation. This was followed by such firm contraction of the vagina, that the uterus ever afterwards remained in its proper situation.

This subject has recently occupied the attention of the surgeons in Paris, and several notices have appeared in the Reports of the proceedings of the *Academie Royale de Medécine*, and in the Parisian journals, relative to it. I think an account of these discussions cannot cannot fail to interest the members of our profession in England.

The first of these notices, of which I shall give an account, is that of two communications made to the Academie on the 11th August, one by M. Velpeau, the other by M. Bérard, jun.

"M. Velpeau communicated the case of a woman, about fifty years of age, who had for a long time been affected with prolapsus uteri. There was also cystocele, pushing the uterus backwards. An operation was performed according to the plan of MM. Marshall Hall, Heming, and Ireland, though with the following modifications:—In order to effect a considerable tightening, three shreds of the mucous membrane of the vagina were removed, one anterior, the other two lateral, beginning at the os externum; each of these shreds was ten lines in breadth, and two inches and a half in length. A difficulty is usually found, after removing the shreds, in making the suture. M. Velpeau took the precaution to fix the thread previously. The operation was not attended with any untoward event; the hæmorrhage and pain were very slight, and cicatrization ensued by the first intention. Some colic pains, arising from the retention of some fæcal matter, were subdued by laxative medicines. The patient was cured two months ago, and the cure promises to be permanent. The operation is at once free from pain or inconvenience, and appears most effectual.

M. Maingault objected, that, in the case of young women likely to become mothers, this operation would involve serious inconveniences.

M. Velpeau observed, that this objection might appear well founded at first sight, but that there were facts to show that cicatrices of the vagina may yield sufficiently during labours to admit of the passage of the fœtus.

M. Bérard, jun., related the case of a woman, in which he performed the same operation with entire success. Out of three instances in which he had himself been the

operator, two persons were completely cured.

Since that day M. Bérard has repeated the same operation. He proposes to designate it by the term 'Elytroraphie.'"

To this brief account of the proceedings of the Academie, I beg to add that of a clinical lecture by M. Velpeau, published by Dr. Dufresse, in the "Journal Hebdomadaire," for August the 29th, tom. 3, No. 35, p. 275:—

"There came under my care (says the professor) a woman, aged 58, of dark complexion, and well formed, affected with prolapsus uteri to such a degree that this organ projected through the os externum. The cervix was neither inflamed nor ulcerated. The patient experienced no pain, and she could reduce the tumour herself.

This affection is rather an infirmity than a disease. It may, however, become a source of serious disease, in consequence of the dragging which is produced by it on the parts contained with the pelvis. It may also be the cause of peritonitis, inflammation of the cellular membrane of the pelvis, and, consequently, of abscess; and the intestines may be drawn into the *cul de sac* which is thus formed. It may also be the cause of strangulated hernia; and, lastly, of ulceration of the neck of the uterus.

The surgical means which have been hitherto applied are only palliative. They consist of pessaries, by the use of which the patient is subjected to numerous accidents. There is considerable variety in the form of these pessaries; some are oval, others elliptical, or "en gimblette." They are with difficulty retained in their proper situation, and are ill calculated to support the uterus. They imbed themselves deeply in the parietes of the vagina, and produce inflammation, in consequence of which it is frequently necessary to withdraw them. Others have the form of a "bilboquet." It has a stem, which projects out of the vagina, and produces much inconvenience when the patient sits down. This is often broken, and then the cup remains in the vagina, where it becomes covered with a calcareous concretion. Pessaries have also been known to perforate the recto-vaginal septum, and the sores thus produced to become fistulous. There are, besides, "pessaires élytroides." These are with difficulty kept in the vagina.

The insufficiency, then, of these means, and the inconveniences which follow their application, justify the efforts that have been made to obtain a radical cure; which has been effected in some cases.

There is one principle only, but this is effected in various ways. It has been founded upon that which is adopted for the cure of prolapsus ani. This consists in contracting the orifice of the anus to a greater or less extent. Hey was the first to adopt it in England, but M. Dupuytren, in France, described it with much more accuracy, and ought justly to be considered as the first who gave rules for its performance. Thus, from the success obtained in cases of prolapsus ani, it has led to a belief that the same benefit might be expected in cases of prolapsus uteri, by contracting the vagina.

The first idea of this operation is due to M. Girardin, who described it in a memoir which he presented to the *Société de Médecine de Metz*, or *de Nancy*. He proposed to contract the vagina, and if necessary even completely to obliterate it in women in whom the catamenia had ceased. He found many opponents to his ideas, which were rejected. The manuscript remains unpublished, the journal of the Society having given only an analysis of it, which I have now before me.

These ideas have since been renewed, reduced to rules, and adopted with success. M. Dieffenbach, of Berlin, has employed this method. In 1831 many of our young surgeons went into Poland, and they addressed letters to the "Gazette Médicale," in which they gave an account of many cases of procidentia uteri, in which there had been performed an operation similar to that adopted by M. Dupuytren for the cure of prolapsus ani.

Two years ago M. Langier tried to cure a case of prolapsus uteri, which came under his care, by contracting the vagina. I believe this case has not been published.

M. Tanchon was acquainted with this method, but kept it a secret; he has published nothing upon it; he has only put in his claim against that of the English surgeons, who wish to consider the priority in reference to this operation, as due to themselves.

M. Dieffenbach is contented with removing the folds of the vagina near the inferior orifice.

M. Langier cauterized a broad strip of the mucous membrane with the nitrate of mercury.

MM. Marshall Hall, Heming, and Ireland, in England, have performed the operation with complete success. Their method consists in removing an elliptical shred of the mucous membrane from the internal surface of the vagina, an inch in breadth, and several inches in length. The wound is then united by the interrupted suture. In some cases two such shreds have been removed, one from the left, and the other from the right side.

In the case which I have described, the catamenia had subsided, for a long time. The uterus projected two inches externally; the tissues were not hypertrophied, nor had they undergone any other alteration of structure.

The plan which we propose is as follows:—First, to remove the anterior column of

the vagina, from the inferior part to the superior, before reducing the prolapsus; then, to reduce it, and remove from the lateral parts of the vagina, both right and left, and along the whole length of this canal, a band of the mucous membrane; and, lastly, to unite the anterior wound by the interrupted suture.

In our opinion it is much better, when the procidentia is not very considerable, to insert the sutures before removing the anterior shred of mucous membrane, so that the threads may be situated about a line from the edges of the wound. We advise this to be done, in consequence of the pain causing the parts to contract, when the excision is made before the sutures are inserted; and, in many cases, when this happens, it is exceedingly difficult to insert them. In the dissection of the anterior shred considerable caution is necessary lest the vesico-vaginal septum be completely cut through.

The woman who forms the subject of this communication, experienced no inconvenience; and some days since she walked in the wards of the hospital, and in the gardens, without the least tendency to a return of the prolapsus. We may now, therefore, calculate upon almost certain success by an operation."

What I have to add is a little amusing. It seems M. Girardin has written to the Academie to remind its members that in 1822 he had proposed to cure prolapsus uteri. It is added that M. Girardin "a voulu par cette communication assurer à l'operation son origine et maintainer à la chirurgie Française (!) la priorité de l'invention, sinon de son execution."

It seems that the profession in France remained steady in their opposition to this measure, and that M. Girardin slept upon his mere proposition. I do not imagine, therefore, that either will gain much by any attempt to deprive me and Dr. Heming of whatever merit there may be in having both devised and executed this simple, this painless, almost bloodless, yet important operation. To compare our operation to that of Hey, or that of Dupuytren, for prolapsus ani; or to those of M. Dieffenbach, and M. Langier, for prolapsus uteri, neither of which could succeed, is equally futile. As to M. Tanchon, who could keep his mode of proceeding secret, he does not deserve a moment's notice.

Without attaching too much importance to it, I cannot but regard this operation as a valuable addition to our curative means. Prolapsus uteri is frequently a great calamity. The mode of cure proposed is at once effectual, and free from either pain or danger if properly performed.

Cure of Nævus.

There is one other application of the principles of inflammation to the cure of disease, which I also proposed some years ago, and must briefly notice in this place. It occurred to me that if I could change the vascular texture of certain forms of *nævus* into firm lymph or cicatrix, I should effectually cure that congenital disease. The plans which I proposed in order to accomplish this object, are represented below:

The circle to the left represents a nævus punctured from one point, in various directions, by means of a needle of considerable size, with cutting edges; the middle circle represents a nævus absolutely *divided* by two operations; the third, a nævus pierced in several parts by a needle and thread, the latter being left to excite inflammation. Little pain is inflicted, scarcely a drop of blood is lost, no scar is produced; the deposit of lymph is effected very slowly; but it is only necessary to repeat the operation often enough, at due intervals, and to wait long enough for Nature's processes. The celebrated Professor Lallemand, of Montpellier, has quite recently proposed a precisely similar mode of proceeding; the *only* difference being that that gentleman suggests the propriety of leaving the needles themselves in the nævus, for a time sufficient to induce the deposit of lymph.

In February, 1831, I observed, "the danger of hæmorrhagy from the excision, the excessive pain of the ligature, and the extensive scar left by vaccination (as these have been respectively employed for the cure of nævus), induced me to consider whether some less objectionable mode of operation in these cases might be devised.

I communicated my suggestions to several eminent surgeons some years ago. I am not aware, however, that the plan proposed has been subjected to the test of experiments by any of them.

About nine months ago I was afforded the opportunity of examining a case of this kind, and of superintending the operation, by my valued friend, Dr. Heming, of Kentish Town.

This operation consisted in introducing a couching needle, with cutting edges, at one point of the circumference of the nævus, close by the adjoining healthy skin; from this point the instrument was made to pass through the tumour, in eight or ten different directions, so as to produce slight incisions through its textures, parallel with the skin, but not so as to pierce the tumour in any other part. The first point of puncture was made the centre of the several rays of slight incisions, effected by merely withdrawing,

and again pushing forward the little instrument, in the manner and in the various directions just described.

The nævus was oval, and rather larger than a shilling; the couching needle was introduced at one point, passed as nearly as possible to the opposite edge of the tumour, without piercing it, and then in various directions, until eight or nine punctures, or rather incisions, traversing the texture of the tumour, but not the skin, had been made.

A little pressure was then applied over the tumour by means of strips of adhesive plaster.

There was no pain, and of course no hæmorrhagy, and as the skin was only punctured in one point there could result no scar.

I expected that inflammation would take place, and that a cicatrix would be formed, which, from its solid texture and progressive contraction, would obliterate the textures of the tumour.

For some time, for several weeks, little appeared to have been effected. There was little or no change in the appearance of the nævus of any kind; indeed, it was almost concluded that the plan had failed, that the vitality of the part had been too low to yield the degree of inflammation required for the cure.

What a short time did not effect, however, a longer period accomplished completely. Half a year after the operation the tumour was found to have disappeared, and the colour of the skin to be nearly natural; the skin itself was preserved perfectly free from any appearance of scar.

It is plain that the operation might be repeated at longer or shorter intervals, and with more or less numerous punctures, according to the degree of force apparently requisite to induce the given degree of inflammatory action for the obliteration of the tumour.

The mode of treatment might also possibly be adopted for the cure of some of those congenital marks which disfigure the face, the instrument being cautiously introduced underneath, and parallel with, the surface of the skin. If the loose vascular or cellular substance were thus obliterated, the colour would disappear.

But at this time I would confine myself to the consideration of the cure of nævus. To obviate the occurrence of hæmorrhagy, of pain, and of scar, is of sufficient importance in itself, to attract the attention of surgeons in the treatment of this affection. But, besides this consideration, nævus sometimes occurs in situations, as in the tongue, the eyelids, and not admitting of any other mode of operation. It does not appear that pressure forms any necessary part of the treatment. The cure in the case detailed was gradually effected long after pressure had ceased to be employed."

In December of the same year, I added—"Dr. Heming, to whom I am already so deeply indebted, has again afforded me an opportunity of observing the effect of puncture in the cure of nævus. The case was doubly interesting, from combining ulceration with the ordinary circumstances of that affection.

The tumour was oval, about one inch and a half in length, and three-fourths of an inch in breadth. The central part was undergoing the ulcerative process; around the ulcer the nævus existed in the form of a ring, about one-sixth of an inch in breadth. The edges of the ulcer were ragged, and slightly phagedenic; the surface of the ulcer was *mali moris*, and had bled from time to time. The nævus rose about an eighth or a tenth of an inch above the surface of the skin.

A common broad needle, with cutting edges, was passed through the substance of the nævus, at its base, and under the ulcer, from side to side, in every direction. Several punctures were made, but one would have been sufficient.

In the course of one week the ulcerative process had undergone the most interesting change into the adhesive. No better or more beautiful illustration could be presented of the *Hunterian* doctrines. The ragged edges became smooth and white; the ulcerated surface covered with a film of coagulated lymph. In a few days more the whole ulcer was completely healed.

As a much slower process, the deposit of coagulable lymph encroached on the edges of the remaining ring of nævus, which, in the space of one month, had become reduced to one-third its original breadth.

At this period it was thought right, in order to accelerate the process of obliteration, to repeat the operation. But on examination, the process of obliteration of the ring of nævus was going on so beautifully, that we determined to leave it for daily observation. The deposit of coagulable lymph, with obliteration of the vessels, gradually encroached upon the breadth of the ring of nævus, and destroyed its redness and tumour. Each successive week induced an obvious change. The whole process was so distinct, and so peculiar, that, however a shade of doubt might be cast upon the former case, none could possibly subsist in regard to the nature of the cure in this.

That every kind of vascular nævus, and even some tumours, morbid growths, and ulcers, may be cured by this simple operation, I have no doubt. Such a mode of obliterating vascular texture, and of changing vascular action, must have numerous applications in surgery. I have thought it, therefore, incumbent upon me once more to draw the attention of the profession to this subject."

For the following case I am indebted to Mr. Wallace, of Hackney-road:—

"Miss W—, three years of age, had from her birth a nævus occupying the apex and septum of the nose, which produced a very unpleasant appearance; its surface projected, and had the resemblance of a ripe raspberry.

On the 14th of May, 1835, I punctured the nævus in every part with needles, and repeated the operation on the 28th.

At the end of a fortnight I observed a manifest diminution of the vascularity.

On the 24th of June I again punctured it as before. From this time it has been gradually diminishing in vascularity and elevation of surface, and now, after six months, there is not the least appearance of nævus remaining, the part resembling, with regard to vascularity, any other part of the face.

Mr. Wallace observes, it will be remarked, that the seat of this nævus was such as to render the knife, the ligature, or the caustics, altogether inapplicable; the scar induced would have been a greater deformity than raspberry-like nævus itself. The progress of the cure was extremely slow. Not having seen the case recently, I told Dr. Marshall Hall, yesterday, that I believed a point still remained of the original hue, but having visited my little patient this morning, I find that since my last visit that spot also has gradually and entirely lost its vascularity. It is important to remember this slow progress of the cure, in order to prevent undue expectations and consequent disappointments. It is more than six months since the first acupuncturations were performed.

I must admit that I know not what other plan of cure could have been adopted in this instance. This mode of cure must, therefore, be deemed of great value, and not the less, because it is attended with scarcely any pain, hæmorrhage, or other inconvenience."

As this operation has met with no little opposition, I must be allowed to detain you whilst I adduce two or three other cases. The first is a case for which I am indebted to Mr. Doubleday, of Blackfriars-road. Mr. Doubleday observes,—

"The child of Mrs. Palmer, residing at 37, Garden-row, London-road, was brought to me at the beginning of November, 1834, with a diffuse swelling between the eyes, encroaching upon the left orbit, and of the size of a large nutmeg. On applying pressure the tumour almost disappeared, but the moment the finger was removed, it returned to its former size. The mother stated, the first time she saw her child after it was born, she observed a *bruise* between its eyes, but her mind was made quite easy by the medical man who attended her, assuring her it would disappear in a few days. Five weeks after this she noticed a small swelling, and at the expiration of three weeks more, making altogether two months from the birth of the child, it had acquired the size I have stated.

The case presented a good example of an increasing nævus, situated in the cellular substance. I suggested to the mother a little delay, that I might consider of the best mode of treating the disease, during which it increased so much in size, that she became very impatient to have something done. Some time before this case presented itself, Dr. Marshall Hall kindly explained to me his method of treating nævi, and I considered it an excellent opportunity of putting his plan to the test of experience. Accordingly, on the 5th of January, 1835, in the presence of Dr. Hall, I carefully introduced a couching needle into the centre of the nævus, and moved it from side to side, so as thoroughly to break down the net-work of vessels. This operation was repeated on the 21st of February, 27th of March, 1st of June, 1st of July, 8th of August, and on the 1st of September, 1835. There was not any diminution of the tumour until after the third operation, after which it *gradually* decreased in size; although, I beg particularly to observe, the nævus did not totally disappear until upwards of twelve months after the first puncture.

On the 17th instant the little patient was sent to Sir Astley Cooper, who wrote the following note to Dr. Hall:—

"My dear Sir,—There are no appearances now which indicate the existence of the nævus. Yours truly,

"Astley Cooper."

I have only further to observe, that I believe I performed the operation more *frequently* than was necessary. It is *length of time* that is required, and it will be important to observe the *dates* in this interesting case.

I need hardly point out the advantages of this mode of removing nævus over excision and the ligature; it is only necessary to recal to mind the hæmorrhage induced by the first of these operations, the pain inflicted by the second, and the scar which results from both."

Other cases of nævus have been successfully treated by the same means, by various other medical friends. Mr. Vickers, of Baker-street, showed me a diffused *arterial* nævus, which involved the left nipple, in a little girl. It was cured by the operation. The *progress* of the change induced was traced from month to month, long after the second,—nay, for three or four years. There is now nothing left but a few vessels, as fine as hairs, which will doubtless disappear in their turn.

Another case of nævus of a *venous* structure was shown to me by Dr. Bull. It was situated in the upper eyelid, in the inner canthus. No knife, no ligature, no caustic

could be applied. It was cured by repeated operation with the nævus needle.

I need not adduce more facts. I regard this mode of treatment as the *only* recommendable one. *All others* are, in my opinion, *barbarous*. By the means which I have described we have only to operate *frequently enough*, and to wait *long enough*, and we shall cure every kind of nævus, wherever situated, without hæmorrhagy, without pain, without present danger, and without future disfiguration.

All this is accomplished by exciting adhesive inflammation,—by replacing the erectile tissue of the nævus by the solid tissue of organised lymph.

DISCOVERIES
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MECHANIC, LONDON.

To the Editor of THE LANCET.

SIR:—I throw myself for publication on the liberality of your Journal, which has been so often boasted of as a vehicle for the communication of science. In the year 1827 I attended Dr. Birkbeck's Lectures on Anatomy, at the Mechanics' Institution. I was then following the trade of a plasterer and modeller. Those lectures kindled in my bosom the love of anatomy. I determined to leave my trade, and follow it. I offered my services as a porter to the dissecting-rooms, but could not get employment. Mr. Green of *St. Thomas's Hospital* gave me employment in making casts for his museum, for about twelve months. I then commenced to form a collection of my own. The subject I chose to investigate was embryology, and the connection of the placenta with the uterus. I have examined the uteri of sixteen women who have died undelivered. In 1835 there was no preparation in London to prove the connection of the uterus with the placenta, or the placenta with the uterus, except the preparation marked No. 3535 in the Hunterian Museum. The account of it was drawn up by Mr. Mayo, in the presence of Mr. Stanley and Mr. Owen, and all three concurred in thinking that the preparation established all the points of the structure which are described in it. I would beg the attention of midwifery teachers to that preparation.

The paper on the structure of the uterus and placenta by Dr. Robert Lee, in the "Phil. Trans.," drew my attention to another method of injecting, by making two injections to run at one time, the one in the hypogastric arteries and veins, the other in the arteries of the funis, with different coloured injections, so that it might be seen where each terminated. I have succeeded in this. An artery as large as a crow's quill is seen to pass, filled with injection, from the uterus into the placenta. The large decidual vein round the margin of the placenta was filled with injection. In this vein there are three openings, as large as goose-quills, into the veins of the uterus. These three veins return the whole of the blood from the placenta into the uterus. In the greater number of the uteri that I have examined, I have never seen more than four venous openings, and never less than three.

There is also another set of vessels, called the decidual arteries, and the decidual veins. They go to the uterine layer of the decidua and stop there; so do the veins. They form the short curling vessels of Hunter. Separate portions of this uterus were dissected by Mr. Green, Mr. North, and the late Dr. Hugh Ley, who saw the same appearances. I have the preparation now.

I have also been successful in injecting other uteri. In Magendie's "Physiology," p. 509, 1829, he says:—"In animals, among the small vessels which go from the uterus to the placenta, there is not one which has the appearance of a vein." In my collection I have what shows the reverse; the veins and arteries are injected. In London there are twenty teachers of midwifery, and there is not among their collections a preparation to show the connection of the placenta with the uterus. This is teaching physiology! What do the readers of this Journal think of it? Three out of that number have given me every opportunity of examining that subject. I should be ungrateful if I did not give each of them a specimen as soon as possible. Would it be believed that some of the teachers in the hospitals in London, with their favourites, would have examined gravid uteri and yet not let me know of it, although they knew that I was investigating that subject? They have thought, by having money, and being teachers, that they could not be denied a sight of *my* collection when they applied to see it. I asked them "Why I was not at the hospital to see the gravid uterus examined, as well as their favourites?" I told them that I knew the reason. My coat was not fine enough. But the tailor made the coat only, and God made the man. If the chairs of teachers were got by talent only, a poor mechanic, like me, in investigating nature, would know where to go to pursue his studies. The chairs, however, are mostly got by intrigue. Allow me to prove this. The painter is known by his paintings, and the sculptor by his works. Why not the physiologist by his? Have the physiologists nothing to discover? What have the teachers in London done for the last ten years? Have they no preparations to pro-

duce which we never saw before? All is done for money, and not science. There ever will be in this, as in all other callings, some few who, in silence and solitude, and among the most disheartening difficulties, will travel the rugged up-hill path of science, urged by no other stimulus than the love of truth. Allow me to prove this also. Sir A. Cooper can receive no more honours than he already has. Behold him in his old age working every day. His preparations prove what he has done for these last ten years. Go to Mr. Kiernan, and see his splendid collection. It shows what *he* has done during these last ten years. View Mr. Langstaff's collection; that shows what *he* has done. His kindness to me I can never forget. Go to Mr. Salmon's collection, that will show what *he* has done. There is also Mr. King's (of *Guy's Hospital*) collection of preparations of the heart. This I have not seen. I grant that *museums* have been made during that period, but what *discoveries* have they got in them? Allow a poor mechanic to tell what he has done.

I have dissected 127 human abortions, from two grains in weight to nine months, showing the vesicula umbilicalis, showing the omphalo-mesenteric arteries and veins injected; also the germinal disc in the human ovum,—I believe the only one known, the preparation at nine months in the series of the omphalo-mesenteric vessels. Their existence at nine months is denied by Velpeau. I have a preparation showing the first formation of the amnion and allantois in the human subject; also in animals, showing the amnion and allantois to be one membrane; so that the fluid in the one is the same as in the other. I have dissected, in a series of animals, the vesicula umbilicalis, with its duct; also the omphalo-mesenteric artery and vein. I have dissected four kangaroos, from two to four months gone, showing that there is no urachus in that animal at that time. I have dissected and prepared the whole series of the chick, at every second day of incubation. These dissections prove the following facts:—

1. The general causes of early abortion.

2. By looking at a placenta, if normal, it will tell where the fœtus was first formed.

3. How best to remove the placenta from the uterus, in order to prevent hæmorrhage.

4. The existence of a series of cells in the placenta, like honeycombs.

5. The manner in which the first circulation takes place from the vesicula umbilicalis, and the first blood vessels are formed in the embryo.

6. The second circulation. Do the vessels proceed from the fœtus to the placenta, or from the placenta to the fœtus?

7. The cause of malformations where no bladder exists.

I could enumerate a few more, but shall soon publish them in my work. Taking them as a series of preparations, I am told that they are unrivalled in Europe. In 1835 they were in part exhibited at *St. George's Hospital*, by Dr. Robert Lee, in his lectures; at *St. Bartholomew's*, by the late Dr. Hugh Ley, and at the *Westminster School of Medicine*, by Mr. North, and since by some other teachers.

I think of placing them in some public institution, so that all persons may have access to them,—perhaps the British Museum. I think this will convince any man that hundreds of mechanics are following occupations which Nature never intended them to pursue.

Dr. Robert Lee introduced me to M. Coste, from Paris, a short time ago. That gentleman obtained a gold medal from the Institute of France, for his researches on embryology. M. Serres is the reporter on the memoir to the Institute. I told M. Coste, in the presence of Dr. Robert Lee, that all he had written on the embryology of animals was incorrect. Dr. Lee had seen my preparations in the sheep and the rabbit, with the vesicula umbilicalis between the amnion and the chorion, twelve months ago, and might have confirmed me in my statement to M. Coste, but he chose to be silent. I told him to call in three Frenchmen, and that I would call in three Englishmen; I requested him then to put the book he has published, on the table, and I would put my preparations there, and then let those six report on the whole. Dr. Lee wished me, instead, to show my preparations to M. Coste, and to trust only to the honour of M. Coste for his admissions. This I refused to do.

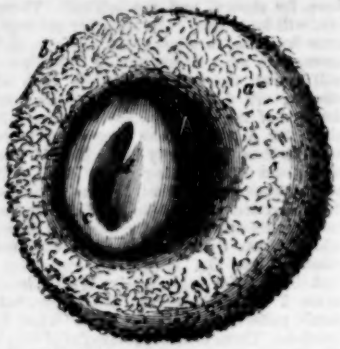
At different times I have compared M. Coste's plates with the preparations, before Dr. Ferguson, of King's College, Dr. Ryan, Mr. Kiernan, Mr. Skey, and other gentlemen, and all are convinced that he never dissected out the vesicula umbilicalis, but has figured the allantois for the vesicle. Mr. Owen, the Hunterian Professor, has fallen into the same error, in his papers on the kangaroo, published in the "Philosophical Transactions," 1834, and London's "Magazine of Natural History," 1837; and he is also wrong in saying that a urachus existed in that animal. What could M. Coste, M. Serres, and Mr. Owen be doing with their eyes? This is the way that errors are propagated. Because they are "great men" it is taken for granted that whatever they say is true, without being called upon to make preparations in proof, and the student seldom thinks of disputing their authority, or that it is necessary to investigate Nature for himself.

The plan I have adopted is the following:—I examine the uterus of animals at eight days after copulation, at fifteen days, and at thirty days, or the calendar month. The cow goes nine calendar months, so does woman; and, as I have found only four *normal* out of 127 *human* ova, I shall see what by analogy I can make out from the *cow*. I am making a fœtal preparation of each organ, when formed,—dating also the period when it was completed. There is an ovum of thirty days after copulation, in the mare, in the *Royal Veterinary Museum*. I asked Mr. Sewel to allow me to examine it, but he refused. I told him that I was not to be beaten by this, but that I would beg money to buy an ass, to destroy it thirty days after copulation. I invited him and Mr. Coleman to see my preparations, and what I was doing, but they have never come. Mr. Sewel asked me *where* I got my knowledge? I told him in an attic, for there was the best light for dissecting. I told him that the Universities and Colleges would do nothing for the advancement of science. What have they done at the *Royal Veterinary College* for the last ten years? I told Mr. Sewel that if he would teach physiology in that College, he must learn it from a mechanic. I beg that some one will intercede for me to examine that ovum, or procure for me a similar one, as I have got the ovum of a cow at thirty days. A comparison of the two would be useful. If I was a "great man" I should not be denied, but I am poor,—a pupil of a Mechanic's Institute, and not of a College. One high in the church told me, to my face, that I had "drunk deep out of Dr. Birkbeck's cup,"—that "the schoolmaster was abroad,"—that "mechanics were getting too much knowledge." I pitied his ignorance.

I know that those who have written on this subject do not like to be criticised by a mechanic. I have been treated by some persons worse than a dog already, and for what? For telling the truth; but by the truth I will stand or fall, though some have asserted that I am out of my senses, and that I should be put into a madhouse. Such men I pity,—I persecute them not.

I will now give a description of the smallest human ovum in my series,—the first formation of the human ovum, with the germinal disc, or spot. The ovum weighed four grains, and is five lines in diameter.

Figure 1.—*The Exterior of the Ovum.*



a. The chorion membrane.
b. The flocculent chorion.
c. The germinal disc, three lines in diameter.
d. The puckering of the disc, in the centre.

Figure 2.—*The Interior of the Ovum.*

a. The chorion membrane.
b. The vesicula umbilicalis, two lines in diameter.
c. The germ, three lines in diameter.
d. A vessel from the vesicula, in a direct line to the nearest part of the membrane, at the head of the germ.
e. The duct from the vesicle into the germ.
e. A vessel from the vesicula to the inferior part of the membrane, that forms the allantois of the germ.
f. The membrane that forms the amnion.
g. The first formation of the urachus.
h. The membrane that forms the allantois.

The membrane by which the amnion and allantois are formed is only one, as follows:—It is an oval membrane, with the germ at

the end of it (*e*), where the shortest vessel proceeds from the vesicle to the membrane, so that the membrane becomes like the figure ∞, or the hour-glass figure. The large O is the allantois, and the turning in the centre becomes the urachus, and the fluid in the one is the same as that in the other. I have the preparations showing the opening through the urachus (which can be seen by the naked eye) into the amnion.

As the allantois shoots to the membrane of the chorion, the space being confined, it becomes depressed in the middle, to suit the circle of the ovum with the urachus, alongside of the duct, from the vesicula umbilicalis to the germ.

The interior of the ovum was filled with pellucid gelatin, which is always to be found in the normal ovum. I do not know the date of this ovum, as the woman met with an accident, and aborted in twelve hours. By comparing this ovum with plate 1st, *fig.* 4, in Velpeau's "Embryology" (which preparation is from Pockel), Velpeau doubts the accuracy of it, and asserts that he (Pockel) must have made it with its long vessel from the vesicle to the allantois. I believe that part to be correct, although a great part of that preparation is abnormal. It is the vessel from the vesicula umbilicus to that part of the membrane which forms the allantois.

In Dr. Barry's translation of Professor Wagner's "Inquiries concerning the Germinal Vessel," in 1835, he states as follows:—"That in the human ovum there is present a germinal spot appears to me probable. What may be its meaning? Does it stand in a certain relation to the embryo?" Also, in his translation of Dr. Valentine's development of the human ovum, he states as follows:—"It appears to be almost certain that the mammalia, before impregnation, possesses no germinal disc, but merely a germinal vessel; the same is the case in the ovum of birds, also, in the early stages of its development within the ovary."

I must confess that this subject still remains defective and dark. Although the brightest names in the pages of science have thought it worthy of their researches, yet their reports contradict each other in many essential points.

The microscopic examinations of most men are made to suit their own imaginations,—a very unpardonable error. Papers which are written without being accompanied by preparations to prove the facts stated, should not be received in any society. I grant that some appearances cannot always be preserved, but six men can always be found to prove the truth of those appearances. There exists, too, much mystery in schools and colleges on this subject. There should be no mystical lore. Knowledge is not mystical; it is only mystified to conceal something that is wrong. I have ova in my collection from six days and upwards, after conception, and every man that has got eyes can see them as well as I can. I have got a diagram of the human ovum with the germinal disc, made by Mr. Perry, so that every teacher of midwifery may use it until he has one of his own. I have given Mr. Perry permission to make diagrams of it. Through the kindness of Dr. Ure and his son, Mr. Perry and myself had an opportunity of examining the ovum through their powerful lens. At the same time no teacher shall use the diagram without having seen the preparation for himself. I am, Sir, yours, &c.

JOHN MILLER, Mechanic.

ADDRESS

DELIVERED AT THE FIRST MEETING OF THE

MEDICO-BOTANICAL SOCIETY,

FOR THE SESSION OF 1837-38,

BY GEO. G. SIGMOND, M.D, F.L.S., F.S.A., &c. &c.

Honorary Secretary to the Society.

EARL STANHOPE, President.

MY LORD PRESIDENT AND GENTLEMEN:—I accepted, with very considerable pleasure, the invitation with which I was honoured by your Council, to deliver the annual address at the commencement of a new session. I consider it as a mark of approbation of my anxious endeavours to promote the welfare of this Institution; and I gladly avail myself of the opportunity of congratulating you on the steady advancement of that branch of science which your labours have contributed to enlarge and adorn, and in which I am most deeply interested. It is only since the establishment of this Society, amidst difficulties of no ordinary kind, that the pursuit in which we are engaged has been recognised as essential to the happiness and the well-being of man. It is most gratifying to find that from the seed that was planted in a soil that appeared ungrateful, has arisen a luxuriance of vegetation, and that a rich harvest will yet attend the toil and the vigilance of the husbandman.

It has been most fortunate for us, that those to whom we looked with hope, have realized our fondest expectations; that those to whom we entrusted the rising plant have watched it, till its firm roots have burrowed beneath the soil, and its trunk bears boughs from which the fruit of knowledge may be gathered, till time shall bring to perfection the majestic tree. Under the auspices of our illustrious President, we have been sheltered from some wintry storms: to his zeal, to his assiduity, we

owe much of our prosperity; he has entered the field as a labourer in the vineyard. The addresses that he has delivered at our annual meetings have shown to the scientific world, that whilst this Society has not been idle, whilst we have gathered, from every quarter of the globe, instruments to aid the healing art, that we selected a president, not alone for his high and dignified position in society, but for his possession of those intellectual qualifications which could guide us in our onward path.

Our professors have exerted themselves with zeal and ability, and we have found our choice ratified by the approbation of those whose estimation is always to be held in the highest respect. Our museum and our collections bear testimony to the industry and attention of our officers; and we now call, with earnest confidence, upon the scientific world for assistance and support to carry into effect the great objects we have in view.

During the first period of our existence, as a body, our attention was directed to the observation of such plants as are indigenous to the country, with the view of extracting from them materials for the healing art. Limited as this inquiry must necessarily be, still it leads to practical knowledge of deep importance; the next subject of our research was in what manner the drugs of foreign soils could be procured in their purest and most efficacious form. Our tables have, through the kindest of our members, been richly furnished with specimens of all the materials used in practice; and from this Institution has gone forth precepts for the cultivators of medicinal plants, and for the importation of those agents on which the medical man must depend in his practice.

There have been various important objects considered here, which have gone before the public, and produced useful results; they have also come within the scope of our inquiry, because we have embraced the consideration of every organized and inorganized body, which can give its aid in the preservation of health: thus the adulterations of tea, so admirably inquired into, by Professor Burnett, the best modes of obtaining prussic acid, the addition of arsenic to candles, investigated by Professor Everitt, have been here the source of consideration, and we have been enabled to deserve, from the extended field of our inquiry, the support not only of the lovers of science, but of that public whose welfare we have tended to increase.

Our transactions have been sparingly published, not that our materials have been wanting, but that from the limited funds we possess we must narrowly watch our expenses; it however gives me the sincerest pleasure to inform you, that, owing to the liberality of our illustrious President, we are now employed in preparing a new volume for the press.

We are still called upon to prosecute, with unabated energy, all those provinces of natural history upon which we have been engaged; and we must likewise remember that there is a wide and magnificent field for examination, which on every side presents prospects of unbounded riches. To us vegetation displays charms to which a large portion of mankind must be insensible, for as the faculties are more highly cultivated, so do fresh materials present themselves for contemplation, and our powers of investigation are strengthened. It is not to the first outlines of botany our views are to be confined, there is a wider scope for our research. It is not only the diversity of form, the richness of colours, the delicacy of the perfume of each herb that grows, to which our attention is to be devoted; nor are we necessarily obliged to limit ourselves to the classification of nature, much as we may be grateful to those who have undertaken the dry and less interesting study; nor are we called upon to spend our time in the adaptation of nomenclatures. It is to the consideration of the power each vegetable possesses of adding to the enjoyment of life's best blessing—health. It is the pursuit of the discovery and adaptation of means by which the succession of disorders, incidental to the progress of man upon this earth, may be rendered more easy of endurance, or less frequently developed. Beyond this, there are still higher and more enlightened subjects to engage our attention. It is not only the influence of herbs upon individual health and disease that comes within the range of our investigation, we must also look to the great chain of vegetable life, its order in creation, its influence upon the comforts, the civilization and the refinement of society. We must examine this great kingdom of Nature as the part of creation in which the existence of man is materially involved, and, indeed, is so essential that the globe is rendered by it habitable to him; for, independent of all consideration of food, and of its affording sustenance to all animated beings, it is of paramount importance to us. Quickly would this planet become one wide and swampy waste, exposed to the most frightful vicissitudes of climate, if the plants, which are admirably adapted to each region in which they grow, did not modify the effects of heat, of light, and of moisture. There is a reciprocity of action between these agents and the vegetable world, by which harmony and order are preserved in Nature, and the beautiful phenomena which constitute the laws of the universe, are performed with regularity, and are the sources of the varied enjoyments which are permitted to us.

It was, of course, necessity that first

taught man to seek from the vegetable world the sources of his maintenance, and of his daily being; he instinctively collected around him a vast number of plants which might serve him for food, for clothing, for raising his habitation, for constructing machinery, for transporting him across the ocean; prudence and foresight gradually taught him to cultivate and multiply these, his humble friends; from experience he learnt that the fluctuation of vegetable produce, and famine, the scourge of ignorant communities, might be avoided by agricultural labour. The accumulation of a vast variety of facts rendered some enumeration of them necessary; they have been, from time to time, collected, till they have formed a science replete with beauty, and which has placed the condition of man upon a higher and more perfect scale.

Cultivation is the necessary consequence of a thorough study of all these points; it is hence we have it in our power to rear those plants that are indigenous to other soils, but which we have been under the necessity of obtaining from their native home; science has prepared for us the steps which are to be followed to secure for us the result of labour. We find that, in a vast number of instances, herbs might be grown in this country possessing medicinal qualities by no means inferior to those which their own climate imparts to them. Even in this cold latitude we daily see the possibility of growing the poppy, the tobacco, and other plants of hotter climates; and the only element which human art has not yet learned to imitate, that is absent, is light. On the other hand, attempts are making to grow some articles of the materia medica in India, for which the inhabitants were dependent upon the commercial intercourse that brought them from the West Indies, from America, or from this country. Ipecacuan would probably thrive as well there as it is found to do in the Brazils, or as does the convolvulus jalapa in Mexico and the West Indies. Dr. Ainslie tells us that he saw the digitalis purpurea growing in the Botanical Gardens at Bangalore, though it was by no means a healthy or robust plant.

As yet, the laws which distribute over the whole surface of the earth the different tribes of vegetables, are not thoroughly understood, nor have naturalists, as yet, been enabled to collect all the facts with anything like certainty and precision; much, of course, remains to excite the curiosity, the ardour, and the enthusiasm of investigators; all that we have learnt inspires us only with more earnestness for the task, and with anxiety to attain some of those magnificent truths which the human mind is permitted to acquire. The cultivator is most anxious to learn what are the varied conditions necessary to the existence of each particular species; he is aware that there are certain limits to which the growth of many vegetables is confined; that neither the date nor the orange will grow without shelter, beyond the forty-third degree of northern latitude; that the vine does not bear beyond the fiftieth degree; the ash of Calabria will not pour forth its manna everywhere, and even the characteristics of some plants are so changed that they are in their own climates biennial; in less congenial places they become annual.

Some of the circumstances favourable or unfavourable to vegetation, are of the deepest importance in medical consideration. Whole tracts of lands are fraught with disease owing to the peculiar state of atmosphere produced by malaria, arising from plants developed in low and moist ground; their decomposition gives rise to emanations which overpower the nervous system of man, and which have the unexplained effect of producing a regular train of signs and symptoms, which recur at stated intervals, and, though they seldom destroy life, render it almost insupportable. The medical man, although he has not, as yet, been enabled to detect the gaseous effluvium, which is, indeed, imperceptible by any means which have yet been devised, is able to point out the localities in which such developments occur; he is furnished with means to prevent the recurrence of the paroxysm, and he is directing his attention to the circumstances under which the human system is most liable to the inroad of the disorder. It remains for the medical botanist more closely to investigate the series of changes that occur, and it will be our province to ascertain the nature of the influence that thus affects us. We are aware that the decaying leaves of the autumn pour forth a principle which they have imbibed during the spring and summer, which was the cause of life and health to the plant; but as the effluvia, when vitality ceases in man, produces a mysterious principle, which baffles inquiry, and which, under certain circumstances, produces typhus fever, so does the ravage of putrescency in vegetable beings widely extend its power.

Nature, with all its wondrous expedients, has provided a certain class of vegetables, themselves endowed with the smallest degree of vitality, whose function it is to remove from the face of the earth all decay of vegetation. The fungi have been not inaptly termed the scavengers of Nature, for they quickly remove all refuse matter which would contaminate the atmosphere. They have the power of suddenly multiplying; a small and scarcely visible number of minute individuals become, in an incredible short space of time, myriads; they swarm, they remove the nuisance, and disappear from existence, when their ends are accomplished, with the same rapidity with which they made their incursions. All these, whether

they are called blights, blasts, brands, mildews, musts, mouldiness, are so minute as to escape the unaccustomed eye, yet their characteristics are indeed striking; they are destitute of those complicated organs which require time for their development, and so deprived of those parts essential to the higher grade of plants, that the boundary of these several productions is doubtful, and the experienced eye of the most attentive observer, aided by artificial means, is necessary to become acquainted with their structure, and the demarcations that exist amongst them. From their not having leaves they have little power to become green, and hence, excepting in one or two cases where there may be a lurid metallic tint, they are generally of lighter colours; though some of the fungi exhibit hues of considerable beauty, they have little of that green which attends the more perfect classes of the vegetable world.

These useful contributors to the well-being of man may, however, become causes of destruction to the most valuable race of plants, if their luxuriance be not checked, or if they be allowed to vegetate where they are not required. Sometimes they attack the harvest, and destroy the hopes and labours of the agriculturist; for, after rainy and damp seasons, where naturally would rise from particular soils unhealthy plants, these insidious parasites spring into sudden life, and large and luxuriant culms deceive the cultivator, until it is too late to find a remedy. Friès has calculated that each of these fungi contains ten million spores, ready to burst into existence for the purpose of destruction, and so small are they, that Bauer computes that no less than two million five hundred and sixty thousand individual fungi would be required to cover one square inch. Many of the grasses are subject to this diseased state, and the appellation of Clavus has been given to it by vegetable physiologists. Barley and oats are said to be liable to it. Wheat is subject to it; but, above all others, rye is most affected, and when the corn thus blighted has been prepared for food, epidemics of the most frightful description have been the consequence; a gangrenous disease attacks the limbs of those who partake of it; epidemics of a most fearful character have destroyed a hardy peasantry; and France, Sweden, and Italy have alike suffered from its destructive ravages. Observation has now shown that lands lately brought into culture, which are low and moist, which are near to forests, produce the spurred rye, and that it abounds most in rainy seasons.

Medicine has, from a common tradition, learnt that this spurred rye, given to parturient women, has the most decided effect in increasing the action of the womb, and hastening the delivery. It has been found, from the judicious experiments of the ablest men, that it has also the power of restraining hæmorrhages from the organs and tissues of the body; hence to us it becomes a matter of inquiry, and there are some points on which our information is not yet complete, more particularly the time at which the ergot should be collected. Messrs. Boetteher and Kluge state, as the cause of the variation of its obstetric action, the uncertainty of the gathering; they state that if it be obtained before the harvest it will prove very energetic, but that which remains after the harvest, they declare to be almost inert; but such is not the opinion of Dr. Bigelow, who thinks it best obtained by care in the process of winnowing. The grains of ergot, being lighter and generally larger than the sound grain, are either detained by the sieve, or blown away by the wind. He says, those who collect ergot for the druggists, have told me that they procure it in larger quantities from the chaff than from the grain. It is probable in all cases, if the winnowing be properly repeated, the grain will, without difficulty, be made sufficiently pure for use. In the grain, when diseased, it is found that one or more seeds are usually enlarged or elongated, and project from the spike, or panicle, to which they belong.

A distinguishing knowledge of the health and decay of some of the most important trees used medicinally, may be derived from some of the lichens, which are never known to attack a plant until it is in a state of putrefaction. Several species of the rhizomorpha family are certain indicators of decay, and when one of this species is seen upon the Peruvian bark it may be declared unfit for medicine. The himantia cinchonarum, the hypochnis rubro cinctus, and the opegrapha rixicola and fissuria are only found when a tree has lost its vitality, and is on the point of decomposition.

Even the last link of vegetable life, that class which is on the very confines of organized life, is of the deepest importance to the health of the individual and the welfare of the great community. The weeds of the sea, the moss of the mountain and the bog, have alike their part to perform in the great economy of Nature, and justify the poet, who says,—

> "All are but parts of one stupendous whole,
> Whose body Nature is, and God the soul."

There are at this moment upon the earth whole regions undergoing, by the instrumentality of these simple agents, the most marvellous transformations, and they are carrying into effect changes which art the most profound could neither imitate or improve. There are desert sands on which, since the days of the deluge, the foot of man has never imprinted a track, there are barren rocks which are now inaccessible to him, which are gradually preparing to be his residence; islands now fertilising for him;

nay, even continents, such as that of New South Wales, which are going through processes which have commenced from the least developed of organic beings. First, upon the burning sand, or naked rock, the simplest structure of vegetable life, the lichen, almost invisible to the eye, fixes itself, blown possibly by the breeze. Its generation is scarcely understood,—it boasts no flowers which require time for their development, or food for their secretion. They struggle through their ephemeral existence either upon the confines of eternal snow, or upon the scorching regions of the torrid zone; they fulfil the general law of Nature—they die, but in their death they are the harbingers of life; they decompose; the particles of which they are formed unite with the oxygen of the air; an acid is the result, which eats its way into the crevices of the rocks, or insinuates itself amid the sand, when its other particles form new combinations, and, burying themselves, become a first layer of vegetable mould; cracks and crevices thus are formed, in which moisture is deposited; these become enlarged, either by the expansion produced by heat, or by frost; the granite mass is burst asunder, or slow disintegration occurs. In the thin stratum of mould a tribe, a little higher in the scale of vegetable life, is developed, probably some elegantly-formed moss, which bears a miniature resemblance to trees and shrubs; these, too, run through their destined course; they die, and leave behind their remains for the birth-place of some more perfect plants, such as the grasses, the saxifrages, the wormwoods, and plants with small leaves and low slender stems. The vegetable mould now deepens, generation succeeds to generation, plants of a more complex structure, of a higher stature, such as shrubs and bushes, begin to rise upon the rock, or the sand, now no longer an inhospitable mass; at last the loftiest monarchs of the forest are developed, and spread over an immense surface, for perchance a single seed, wafted by the wind, borne by some bird, washed by some flood, or swallowed by some animal, and thus prepared for germination, is the means by which the new generation bursts into birth, and changes the face of Nature. There is an uninterrupted circle of events on which the preservation and the gradual improvement of all the productions of Nature hangs, and there is an endless source of inquiry for man.

Look at the sea-weed, which the Roman poet, in the plenitude of the power of the great mistress of the world, in the midst of the cultivation of all the arts and sciences, designated as inutilis,—

> "Algâ littus inutili,
> Demissa tempestas ab Euro
> Sternet."

Nay, when indignantly describing the opinion that rank and virtue are worthless without money, he pronounces them vier than the sea-weed, *vilior algâ*. Yet of what infinite value has it been found in the various uses of life; how essential does it prove in forming another link of the great chain of existence. The countless myriads of sea-weeds which form meadows beneath the surface of the ocean, the submarine forests of these plants have not in vain been created, and the energy and industry of man are already deriving from them fresh sources of utility.

Upon our tables we have had displayed several medicinal species; we have seen from Ireland, from Corsica, from Iceland, and from Ceylon, algæ which have been medicinally employed, and which in various states of disease have proved most serviceable. Some of them, such as the porphyra laciniata and ulvaris, the alaria esculenta and the laminaria potatorum furnish the community in seasons of scarcity with food, or are considered delicacies by the rich. From the experiments of Sir Humphrey Davy it would appear that the fuci yield one-eighth of their weight of jelly, but medical science has derived a principle from them of the most extraordinary value as a therapeutic agent. In the year 1812, M. Courtois, a soap-boiler in Paris, obtained a simple body, to which the name of iodine was given, from kelp, which is procured from burning sea-weeds. This is found to exist in very many species, but is principally obtained from fucus vesiculosus and fucus saccharinus. The laminaria buccinalis of the Cape of Good Hope, however, yields more than any of the European algæ. This element possesses the most extraordinary power over the glandular system, producing absorption in the most rapid and decisive manner. It is employed in the cure of the hideous goitre, or bronchocele, and it is a singular fact, that experience had long since taught some of the inhabitants of South America, that in the sea-weed was lodged a power capable of reducing the goitre, for we learn from Dr. Greville, that the stems of a sea-weed are sold in the shops, and chewed by these people wherever goitre is prevalent. This remedy is called by them palo coto, literally goitre sticks. Dr. Gillies brought with him some fragments of it, which he gave to Dr. Greville, who, on examination, ascertained that plant to belong to the type laminaceæ, and it is probably a species of laminaria.

Such was the zeal manifested by the medical profession, that soon after Dr. Coindet, of Geneva, had introduced it as a remedy in goitre, it was tried in a vast variety of diseases, and though the enthusiasm with which the Genevese and Swiss physicians first promulgated their success has been somewhat diminished by the serious accidents which have followed upon its

incautious use, iodine holds now a high and well-deserved rank amongst our therapeutic agents. Persevering in their valuable labours, many of our most distinguished medical men have taught us to unite this principle with many of those substances with whose value time and experience have made us familiar; and our New Pharmacopœia sanctions the iodide of iron, composed of one equivalent of iodine, and one of iron, which, in the dose of one or two grains, is a useful emmenagogue; the iodide of mercury, composed of one equivalent of mercury, and one of iodine, chiefly used as an ointment in scrofulous habits; the iodide of lead, composed of one equivalent of iodine, and one of lead; the iodide of potash, composed of one equivalent of iodine, and one of potassium, has been highly recommended as a valuable medicine in the dose of from five to ten grains.

This principle may be regarded as one of great value, and the cultivation of seaweeds for the purpose of obtaining the kelp from which it is procured, is becoming an object of the most anxious inquiry. Rocks, formerly barren and unprofitable to their owners, are becoming sources of wealth; and where the fuci do not naturally grow, attempts are making, and successfully, to rear them; and, probably, some of the exotic weeds may by attention be made to propagate here, and yield up their virtues for our use; but beyond this the philosopher has learnt some most useful facts, from watching the operations of Nature, from careful examination of the agency of one principle upon another; some of the weeds weave themselves together, and by thus uniting keep the sand unmolested by the surge, and in some parts of Europe the inhabitants use the elymus arenarius, to bind together the sand, and thus prevent the encroachment of the sea. These weeds, too, in their death are as essentially serviceable as the class of which I have spoken. These algæ, which very probably are formed from the decomposition of the inhabitants of the deep are of the simplest structure; they are composed of vesicles which contain a crystal, most probably absorbed from the salt of the fluid in which they were created, and are likewise made of a gummy or adhesive principle. By this they adhere to rocks or sands on which they are cast, and then, by their decomposition, act upon the solid rock, for the salts which they contain are the only ones which can dissolve silex, which they precipitate from the solution they form, and thus Nature again displays her wondrous skill. The earthy principle called silex is, under ordinary circumstances, neither soluble in water nor the acids; for to this principle the solidity of the globe is owing; it forms the skeleton of the earth, composing alike the summit of the primeval mountain, and the sands upon which the ocean rests. Its masses are the rocks that form a barrier to the force of the waves, and its sands are the shore. From the dryness and insolubility of this principle, which is necessary for the permanence and durability of the globe, it is incapable of sustaining vegetable life; but its peculiar characteristics are gradually overcome by the slow action of these weeds, whose chemical constituents so act, that after the lapse of some years, nakedness is exchanged for a rich clothing, barrenness gives way to fertility, aridity to freshness, sterility to abundance. Thus whole shores become covered with the brilliant verdure of the earth, and many an unprofitable sand has been rescued from the sea, which has either spontaneously receded, or has been shut out by the toil of man; and where attempts have been made to cultivate sands before barren, it has been found that the first step to obtain a vegetable mould, is to plant this first chain of vegetable life.

Over the whole surface of the globe multitudes of different herbs are distributed which differ from each other in their external and internal structure, in their habits, their secretions, their wants, and even their instincts. Not only does each quarter of the globe exhibit its own peculiar vegetable aspect, but the mountain, the valley, and the plain, has each its own particular species, families, and tribes. Some species are confined to one spot alone, from which they have never been known to migrate. Tournefort, in the year 1700, found upon the little island of Amorgos, upon one rock only, an origanum to which his name was given; eighty years afterwards another botanist, Sibthorp, found upon the same spot this plant, but it has never yet been seen elsewhere. The laws which govern vegetation are yet but partially understood, yet we observe how Nature gradually ascends from the lowest form of vegetable life till the more completely organized beings are developed. We see, even from this slight observation upon the value of the humblest plants, that the objects we pursue are of importance, but when we ascend higher in the scale of beings we find each organ to be furnished with some part or portion which may be serviceable to man, and which it is our duty to investigate. The roots, the stems, the leaves, the barks, the woods of plants, and all their varied secretions, are endless sources of power to man; alike their individual anatomy and general physiology afford delight or instruction. To the members of this enlightened assembly it would be presumptuous for one moment to address myself as inviting them to a study in which most of them are highly versed, but to such of you, as have not yet been animated with zeal for the pursits in which we are engaged, I am pursuaded you will derive the greatest delight and satisfaction

from entering a field of observation where everything is inviting, where the harmonies of Nature are displayed, and the wants and the wishes of man may, by cultivation, be amply supplied. If you have acquired any acquaintance with animal life, you will be struck with a corresponding train of phenomena in those objects which you are investigating. You will perceive the similarity of functions performed by the roots of plants to those for which, in the animal, the chylopoietic viscera are destined; in the leaves exists a pulmonary system, by which respiration is carried on, as in the gills of fish, in the lungs of quadrupeds; a circulation of a fluid in vessels similar to that of the blood in higher beings, presents itself; various glands secrete from this vegetable blood, honey, wax, mucilage, resin, sugar, oils, nay, even a muscular system is perceptible, by which various motions are performed. Further inquiries lead to the conviction that irritability, sensation, and, probably, instinctive powers are developed; beyond these considerations, these researches lead to the ascertaining that particular medicinal, or detective principles, reside in each, which may be evolved, and that particular groups assimilate to each other not only in anatomical structure and external character, but in the power of producing upon the animal economy particular effects.

I have only further to add, that I am well persuaded that every member of this Society will feel that at no period of the history of medicine was that branch to which we are devoted cultivated with greater ardour; and when we reflect on the vast means which the commercial intercourse of this country with foreign lands now offers, for the proper investigation and immediate introduction of every medicinal agent, we must feel that the honour of the country is involved in the proper prosecution of those objects which we have cherished, and that every effort should be made to extend the blessings of health to all mankind, and to teach them to render their path on earth more happy, and thus to fulfil the great design of Him by whom all was wonderfully and harmoniously created.

MEDICO-BOTANICAL SOCIETY.

Wednesday, Nov. 8, 1837.

The first meeting of the session was held this evening. Earl Stanhope, the President, directed attention to a fine specimen of the Cuchunchillo, obtained from the Caraccas, and which has been much used for the cure of lepra tuberculata, in that state, with much success. Dr. Sigmond afterwards delivered an introductory address.

BRITISH MEDICAL ASSOCIATION.

Tuesday evening, Nov. 14, 1837.

A meeting of Council was held this evening at, Exeter Hall, Dr. Webster, President, in the Chair.

MEMBERS PRESENT.

Messrs. Crisp	Messrs. Hilles
Davidson	Hooper
Delph	Howell
Eales	Hughes
Evans	Ireland
Harrisson	Porter
Herring	Dr. Marshall Hall

The following gentlemen were proposed as new members, and elected:—

Mr. John Lavies, King-street, Westminster.
J. Richards, Newcastle-street, Strand.
C. J. Preedy, Chapel-street, Pentonville.
— Angus, Clapham.
— Martin, Pentonville.
— Hillas, Holborn.
J. F. Clarke, Princes-street, Soho.
Dr. Donald Murray M'Ewan, Parliament-street.
— Wilmot, Stroud.
— Thomas Thomson, Alva.
— Lynch, King-street, Snow-hill.

The President then read a letter from Mr. Isaiah Burrows, of Stonehenge, Plymouth, who expressed his best wishes for the success of the Association. An article having appeared in the *Devonport Telegraph*, respecting the late general meeting of the Association, and in its favour, Mr. Burrows immediately wrote to the editor of that paper, and explained the present anomalous state of the profession. This letter Mr. B. had also printed in the form of a circular, and sent round to the medical men residing in Plymouth and Devonport. It recommended a thorough reform in the profession, and the establishment of a National Faculty of Medicine,—the union of all classes,—as the only means of effecting any beneficial change, and called on the general practitioners of the neighbourhood to support the objects of the Association. In reply to this letter, the President had recommended Mr. Burrows to call a meeting, and stated that the objects of the Association were to concentrate the whole profession into one body, for the purpose of amending the profession. There was no wish to separate the branches of the profession in this undertaking, but to receive the aid of every individual who came forward with good intentions. Mr. Burrows had since written to express his determination of calling a public meeting, though, he stated, that the profession in the part he practised was most divided. Mr. Burrows was unanimously elected a member.

The following case then came under consideration:—A gentleman in Scotland had written to be admitted a member, and stated that he was a Fellow of the *London College of Medicine*, in proof of which assertion, he had sent the testimonial of a magistrate, in the town in which he practised. This testimonial also stated, that the applicant had been in practice for upwards of twenty years in the same place. The question arose whether, according to the laws of the Association, this gentleman had proved himself a "legally qualified practitioner." It was contended, that as the *London College of Medicine* only granted diplomas to candidates already legally qualified, that this gentleman not forwarding any other diploma to the Council, was no reason that he did not possess it, as he might consider the one he had sent that to which there was most honour attached; that he was probably in practice before the passing of the Apothecaries' Act; or, if not, that that Act did not extend to Scotland. These, and many other considerations, were urged, and the gentleman was ultimately elected a member.

During the conversation which occurred on this case, Dr. M. Hall stated, that he remembered that two of the three surgeons of a great provincial hospital, who had been in practice for many years before the Apothecaries' Act, were not members either of the *London College of Surgeons*, or of any other College; but they were not the less respected, or less able practitioners on that account, and would, undoubtedly, be eligible to become members of the Association.

POOR LAW COMMITTEE.

The following gentlemen were then elected into a Committee, for the purpose of watching over the proceedings in Parliament, and elsewhere, respecting the New Poor Law; and to take into consideration the plans that should be adopted for the furtherance of the reform of this law; and also to collect information respecting it.

Mr. Bainbridge	Mr. Hilles
Clarke	Porter
Crisp (Secretary)	Rowe (Chigwell)
Davidson	Wagstaffe
Eales	

An Anti-quackery Committee was also formed of the following gentlemen:—

Mr. Delph	Mr. Hooper
Eales (Sec.)	Howell
Evans	Hughes
Harrisson	Ireland
Herring	Wakley, M.P.

Dr. Marshall Hall.

APPOINTMENT OF ASSISTANT SECRETARY.

The business of the Association having so much increased, and being still on the increase, it was proposed that a clerk to assist the Honorary Secretary be engaged; Mr. Harrisson, however, thinking it would be better that the Secretary and his assistant should both be of the profession, obligingly offered his assistance. He was accordingly elected Honorary Assistant Secretary.

The following resolution was then put, and carried unanimously:—

Resolved.—That the Council of this Association earnestly recommend their medical brethren throughout the kingdom, to call meetings in their respective districts, to consider the grievances affecting the profession; and especially to petition Parliament for a National Faculty of Medicine, and for an inquiry into the present system of medical attendance on the sick-poor.

ESTABLISHMENT OF A LIFE AND FIRE ASSURANCE, AND OF A PENSION FUND.

The question of forming a Committee for the purpose of considering the propriety and best means of forming and establishing a Life and Fire Assurance, and Pension Fund, was then brought forward. The solid and sufficient reasons for the establishment of this important feature of the Association were ably and eloquently discussed by the President, in his address at the general meeting. It is scarcely necessary that we should repeat these reasons, which were again ably and feelingly stated by several on this occasion. The establishment and prosperity of the various life assurance offices, particularly those which were formed of one profession, or calling,—the fact of medical men so frequently dying poor, or becoming incapacitated by illness, or the "wear and tear" of life, for the practice of their profession, and thereby sinking into a state of poverty, are too well known to require to be enlarged upon. The establishment of the above Institution would tend materially to prevent these unfortunate occurrences, and not only smooth the present rugged path of many a practitioner, but make his closing days those of peace and comfort. It was ultimately agreed that the Council do form itself into a Committee for the purpose above stated.

The next meeting of the Council will be held at Exeter Hall, on Tuesday, Nov. 28, at seven o'clock in the evening, precisely.

MEDICAL SOCIETY OF LONDON.

Monday, Nov. 13, 1837.

The Society this evening was again occupied, during a portion of its sitting, with a discussion respecting alterations in its laws. Some observations were then made respecting diseases of the heart, which were chiefly a repetition of those which we published two or three weeks since, in a report of the proceedings of the Society.

WESTMINSTER MEDICAL SOCIETY.

Saturday, November 11, 1837.

Dr. WILLIAMS, President.

ARSENIC IN CANDLES.—ASCITES TREATED BY ACUPUNCTURE. — INSIDIOUS ORGANIC DISEASE.—THE CIRCULATION AND DISEASES OF THE BRAIN.

Dr. ADDISON, in reference to the discussion last week, stated, that Mr. Bird, in some experiments which he had performed on the German wax-lights, had ascertained that if the flame of the candle were intercepted, as by a narrow tube, metallic arsenic was deposited on its sides; whereas, if the flame were perfectly free, arsenious acid was given out.

Dr. SCOTT, to show how much better the public health was attended to by the government of France, than by that of this country, mentioned the following fact, which had been communicated to him. Two years since it was reported to the Prefect of Police in Paris, that a manufacturer of candles was in the habit of using oxide of arsenic to improve the wicks. A committee was immediately ordered to analyze the candles, and to give an opinion respecting the safety of employing them. The report decided that the arsenic was present, and that it was injurious. All the candles made were confiscated, and an order of police established for the purpose of preventing any future fabrication of the kind.

ACUPUNCTURE IN ASCITES.

Mr. KING related the following case of ascites, in which he had been induced to employ acupuncture as a means of cure, from the success attendant on that proceeding in some cases of hydrocele. The patient had suffered from symptoms of ascites for some time, for which he had been treated judiciously, but without much benefit, by diuretics. On the 2nd of September last Mr. King was called to see him. He was in a state of great mental and bodily depression, his pulse was small, varying from 110 to 130; his skin was flaccid; the muscles shrunk; the countenance pale and anxious; the breathing difficult. The legs were anasarcous. The girth of his body was four feet eight inches. As he had a decided objection to tapping, Mr. King determined to try the effect of acupuncture. At first he only made one puncture daily, but this producing a decided relief of most of the symptoms, at the end of three days, the number of punctures was increased to three, four, and even eight in one day. The punctures were sometimes made daily, sometimes every alternate day, but a longer interval than this was never allowed to take place. The amendment went on gradually and steadily, the abdomen getting less, and the patient's health and spirits improving. The girth of the body was now only three feet, four inches; he (Mr. King) hoped the case would terminate in a perfect cure. The proceeding was attended with very little pain; there was sometimes a little soreness the following day. The mode of action of acupuncture might be explained in the following manner:—After the puncture the cellular tissue, which was before flaccid, became filled with fluid, and for the space of three or four hours became tense and œdematous; then, for two or three hours after, this œdema and tenseness gradually diminished. For the next four or five hours absorption took place, and the urine, which was much increased in quantity, carried off the serum.

Dr. JOHNSON exhibited some morbid specimens, illustrating the following case, which showed the occurrence of three most important organic diseases in an individual, the nature and seat of which were not suspected during life. A lady, forty years of age, on becoming pregnant five years since, became affected with obstinate and distressing vomiting. The presence of the pregnancy was not unequivocally proved until the seventh month, at which period quickening took place. She went her natural time, and had a fine child, now living, and suffered no more from sickness until last Christmas, though she had been occasionally ailing. At the last-named period, however, the vomiting again occurred as distressing as in the former attack; pregnancy was again suspected, though no other symptom of that state existed. The vomiting was very little relieved by the means employed. Three months since she called on him (Dr. Johnson) respecting this obstinate sickness. She could keep nothing on her stomach, and was gradually declining in health and strength, with no other prominent symptom, indicative of organic disease. The medicines used only afforded a temporary relief; the loss of health and strength gradually increased, and she took to her bed, the only symptom of importance being still the vomiting; she had no cough, but complained of a sense of uneasiness at the right side. On Wednesday last, on examining the chest, cavernous respiration was detected on the upper part of the left lung; she still never complained of cough. On examining the body after death, the fat in the integuments of the abdomen was two inches in thickness; the omentum was very large. The lungs contained a number of tubercles in various stages of development. The ileum contained twelve ulcers, some of them with hard raised edges, bearing all the appearances of old standing lesions. The liver was much enlarged, and its interior in such a state of "rottenness" as scarcely to allow of any handling; the preparation exhibited a portion of the exterior part of the organ, and was a fine specimen

of "fatty liver." The case showed the presence of three organic diseases of vast importance, with few symptoms to denote their presence. One of them only was detected a few days before death, by the aid of the stethoscope. The stomach was suspected to be at fault, but this organ was found healthy.

Dr. ADDISON said that Dr. Johnson's patient perished from the "fatty liver," and not from phthisis; the general symptoms present in the case, as sickness, nausea, and loss of appetite, were those of fatty liver. He had attended a lady who died with similar symptoms, and though she was supposed to be labouring under phthisis, yet there was nothing to be detected in the chest indicative of disease in that region. After death the liver was found to be fatty, and the lungs healthy. This case interfered with the opinion of M. Louis, that fatty liver invariably was a part and parcel of phthisis. He (Dr. A.) had noticed an oily, smooth state of the surface in cases of this kind.

Dr. JOHNSON—That was the case with my patient.

Mr. HAY now read a paper

ON THE EFFECTS WHICH THE PECULIAR CHARACTER OF THE CIRCULATION WITHIN THE HEAD HAS IN MODIFYING THE TREATMENT OF DISEASES OF THE BRAIN.

The author commenced by stating that the contents of the skull might be considered as twofold. First. The solid nervous matter, by which the mind communicates with the external objects of nature; and, secondly, the circulating fluid, the constantly received supply of which was necessary to keep the nervous matter in a state fit for the performance of its functions. Effects might be produced on the brain by alterations either in the quantity or the quality of the circulating fluid supplied to it. As examples of the latter, were cited—the torpor produced by the morbidly dilute state of the blood, which occurs in dropsy; the effects produced by alterations in the state of oxygenation; the languor and depression produced by damp foggy weather, and by ascending lofty eminences,—exemplifying the effects of imperfect oxygenation. While the activity produced by clear dry weather, and the state of drunkenness produced by the inhalation of nitrous oxide gas, exemplified the effects of hyperoxygenation. As regarded the effects produced by alteration in the quantity of blood, the brain being confined in a hard, bony case, incapable either of enlargement or diminution, and which case is always filled in every part, it is evident that the aggregate amount of blood contained in it must always remain the same. Any alteration, therefore, in the supply (whilst the frequency of the pulse remains unaltered), must be produced by a change in the relative distribution between the arteries and veins, the enlargement of certain vessels being obtained at the expense of certain other vessels. It is obvious that, *cæteris paribus*, a larger quantity of blood will circulate through the head within a given time, when the relative quantities contained within the arteries and veins is precisely equal, than when any other distribution obtains; should the quantity contained within the arteries be decreased by one-half, for example, the quantity contained within the veins must be diminished in like proportion, in order to make room for the dilated arteries; the veins would only disgorge one-half of their usual quantity, and the arteries would only receive, at each pulsation of the heart, one-half their usual quantity of blood. Hence arose an important division of the diseases of the head, into those accompanied by arterial, and those accompanied by venous congestion; and the inference Mr. Hay drew from it was, that in abstracting blood in cases of affection of the head, we ought not to take it indiscriminately from the arteries and veins, but to make a choice, and that choice to be determined by the character of the congestion present. If, in the natural state of the circulation within the head, the blood was equally distributed between the arteries and veins, any turgidity of either class of vessels would produce diminished energy of the organ; but, owing to the quantity in the veins being naturally in excess, an increase in the quantity contained in the arteries, to a certain extent produces an increased action, until we come up to the point of equality; beyond that, diminished energy is the result. As illustrations of the subject, Mr. Hay mentioned various cases of disease. The inflammatory affections of the heads of infants and of children, were remarkably relieved by leeching and cupping from the temporal artery, which diminished arterial cerebral congestion. In fever, accompanied by affections of the head, and in epilepsy (both of which were species of the same congestion), increased action of the brain was followed by diminished action; and, as illustrations of venous congestion, he mentioned the cases of narcoticism, where the patient has not taken a sufficiency of the poison to produce death, but merely protracted sleep; and that state of drowsiness and lethargy which often precedes an attack of apoplexy, both which affections were only to be relieved by opening a vein.

A long discussion followed the reading of this paper, chiefly respecting the often-argued question of the quantity of blood in in the brain. Many arguments on both sides of the question, were published in page 229 of the last volume of THE LANCET, in a report of the proceedings of the *London Medical Society*.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 14, 1837.

DR. BRIGHT, President, in the Chair.

Observations on the Result of Amputations in this and other Countries. *By* BENJAMIN PHILLIPS, *F.R.S., Surgeon to the St. Marylebone Infirmary.*

THE professed object of the author, in the paper now presented to the Society is, in the first place, to prove that the opinion commonly entertained with respect to the mortality succeeding to amputation is incorrect; secondly, to exhibit the results of inquiries undertaken in France, Germany, America, and Great Britain, as to the mortality consequent upon this operation, and to compare these results with each other, for the purpose of ascertaining to what extent is justified the belief in the greater success of amputation in our own, than in other countries; and, thirdly, to adduce evidence in proof that the treatment commonly employed in certain cases of old standing disease, is less favourable in its results, and less in consonance with pathological principles, than that proposed by himself, in the course of the present inquiry. The author lays much stress on the importance of possessing more exact records of the results of operations in large hospitals, as the only sure data upon which to found a judgment of their comparative safety; the memory of individuals being, as he has often had the opportunity of proving, quite insufficient to furnish even an approximation to the truth. The author admits that many hospitals may be so circumstanced, either permanently, or at particular periods, as that the results of amputation in them should seem to be peculiarly unfavourable; but he has endeavoured to obviate this difficulty by making such a selection as would produce something like a compensation in this respect. The amputations included in this inquiry, are those of the arm, and the forearm, the thigh, and the leg; all have been performed within the last four years in civil hospitals, or in the private practice of hospital surgeons. The gross number of such cases is 640. Of these, 490 are reported "cured," and 150 died, either in consequence of the operation, or from the progress of the disease for the relief of which it had been performed. The author proceeds to analyze the gross number, and exhibit the proportion furnished by the different countries comprised in the inquiry, in a table, from which it appears that the proportion of deaths after amputation, in Great Britain and France, is a fraction *below*, while in Germany and America it is a fraction *above*, the average. It would be impossible to detail, within the limits of a brief abstract, all the observations upon which the author founds the opinion that the amount of mortality is greatly increased by the almost entire abandonment of the system of consecutive union of stumps, resulting from the amputation of long-standing chronic diseases, attended with profuse suppuration; an opinion which leads the author to recommend a modification, in such cases, of the present mode. Although the author is not an advocate for the substitution of consecutive for immediate union, in any class of cases, he is strongly impressed with the opinion that many of the evils resulting from immediate reunion, in an extensive class of cases, might be obviated by establishing, in the vicinity of the part where amputation is to be practised, an artificial suppurating surface, by means of a seton or issue, and maintaining such secretion for a time after the healing of the stump. The author professes to have no direct evidence of the efficacy of the proposed modification; but he thinks himself warranted, by the premises, in maintaining the probability that it would render unnecessary the plan of having recourse to secondary union, whose advantages in any cases are almost counterbalanced by great inconvenience.

VESICULA UMBILICALIS OF THE KANGAROO.

AT a late meeting of the *Academy of Sciences*, Paris, M. Coste announced, that, during his stay in London, he had been enabled, through the kindness of M. Owen, to dissect the embryo of the kangaroo, and that instead of one vesicle projecting from the abdomen of the animal, he had discovered two, an alantoid and a vesicula umbilicalis.

Since then, we perceive that M. Owen has written to the Academy, announcing, also, the discovery of a vesicula umbilicalis, but without mentioning the name of M. Coste. We hope that this circumstance may not involve any of those disagreeable charges of piracy too common, at present, in the medical world.

Mr. Miller, whose paper on Embryology will be found in another part of the Journal, has long since announced the existence of the vesicula in kangaroos, but from analogy, not direct dissection.

COMPARATIVE ANATOMY.—The fourth part of Dr. Grant's excellent "Outlines of Comparative Anatomy," has just been published by Bailliere, of Regent-street. This part, containing an account of the digestive organs, and of the chyliferous and sanguiferous systems, is illustrated by several highly-finished wood-cuts.

THE LANCET.

London, Saturday, November 18, 1837.

Sancho Panza once delivered, in the shape of a proverb, some sensible advice on the impropriety of people meddling with various disagreeable matters, which, if left alone, might possibly remain unheeded and inoffensive. It would be well for our hospital surgeons were they to obey the maxim of the immortal "Squire," and by refraining from stirring up their own dirty deeds, avoid directing public attention to the sources whence they flow; but, as the woman of dubious virtue often makes a louder clamour in defence of her character than the really modest female, so these gentlemen sometimes affect an extraordinary degree of sensibility, and by the manner in which they repel charges made against them, not only expose the weakness of their cause, but lay themselves open to fresh and more severe punishment than that which they originally received. In The Lancet of November 4th we offered some strictures on the case of a man who perished in the *University College Hospital*, in consequence of a penetrating wound of the abdomen, which he had received a few hours before his admission into that hospital. The soldier, by whom the wound was inflicted, was tried for murder, and narrowly escaped being capitally convicted. It is unnecessary for us to refer, upon the present occasion, to all the particulars of this unfortunate case, our more immediate business being with the contents of a letter which we have received from Mr. Tayloe, one of the house-surgeons of *University College Hospital*, and which letter, though inserted in the last number of The Lancet, we received too late in the week to admit of our making any comments upon it at the time of its publication. This unavoidable omission we shall now endeavour to supply. The first remark we are desirous of making is one addressed personally to Mr. Tayloe; we did not wish to insinuate that the evidence given by that gentleman at the coroner's inquest was not conscientiously delivered. We did not accuse Mr. Tayloe of neglect; we did not hear him charged with incapacity of execution as an operator, or imbecility of judgment as a practical surgeon; we were unaware that Mr. Tayloe had ever seen the patient; and, in reference to our article of November 4th, we do not find that we had made the most remote allusion to any of the house-surgeons attached to the *University College Hospital*, or to their conduct upon the occasion in question. We were, therefore, somewhat surprised at receiving a reclamatory letter from Mr. Tayloe, but we were still more astonished, on referring back to an account of the case of James Chaplain, to find that he (Mr. T.) had been the principal medical witness examined at the coroner's inquest.

Was Mr. Tayloe the person who saw the man immediately after the accident, and received him into the hospital? No.—Was Mr. Tayloe the individual who had treated the wounded man throughout? No.—Was Mr. Tayloe one of the surgeons of the hospital; was he responsible for the treatment of the case? No.—It is evident, then, that he appeared at the coroner's inquest as a substitute for another, and it is equally clear that we should consider his letter to us as an emanation from the senior surgeon of *University College Hospital*. In this latter point of view the letter is a curious document, having been made, as it is, the vehicle for some very novel principles relative to medical affairs in general, and the practice of surgery in particular. It is, however, but a vague, loose history, and, though written for the purpose of correcting *misstatements*, singularly enough commences with a very great misstatement. We are reproached, in the first sentence, with having accused Messrs. Cooper and Quain of neglect. This is a sly attempt at enlisting a recruit for Mr. Cooper. We made no charge of any kind against Mr. Quain. We simply mentioned the fact

his having been from home when sent for to see the patient, a circumstance quite accidental, and one which might have happened had his assistance been sought for the wealthiest man in the kingdom.

The accidental absence of the junior surgeon from home, at the time of being sent for, sufficiently excuses him in our eyes, but his worthy colleague finds a better one, assuring us "that Mr. QUAIN had nothing "whatever to do with the case, the patient "being entirely under the care of Mr. "COOPER."

If this be a ruling principle at *University College Hospital*, the sooner that Institution is shut up the better; the patient would certainly have been under the care of Mr. COOPER, if Mr. COOPER had been at the Hospital to take care of him; but, during the absence of that gentleman, have the other surgeons of the Hospital nothing to do with the "accidents" which may be brought in? Is it not their understood duty to attend, one for another, whenever any sudden emergency may demand the presence of a surgeon at the Hospital? or are we to imagine that the savour of Professor COOPER'S surgical knowledge is sufficient to sanctify his very wards, and that a patient once received within their walls has no further need of aid or attendance?

On this principle, a man who has received a dangerous penetrating wound of the abdomen, if he have the good fortune to be carried to Professor COOPER'S wards, at *University College Hospital*, resembles the criminal who has taken refuge in a mosque; he is safe from all further bodily harm. Though the senior surgeon may not see him for twelve or fifteen hours, the junior surgeon "has nothing to do with the case." We are quite sure that Mr. QUAIN himself would not subscribe to so monstrous a doctrine, and that if he had been at home, when summoned to the aid of a suffering fellow-creature, he would have obeyed that summons with cheerfulness and without delay.

It was upon the neglect of prompt attendance on the part of the senior surgeon of *University College Hospital*, that our charge of negligence against that gentleman was mainly founded. We ask again, and we suspect that it will be extremely difficult to furnish a satisfactory answer, why did not the senior surgeon, whose turn of attendance at the Hospital it happened to be, repair immediately to that institution, and assure himself, by actual examination, of the state of the wounded man nominally placed under his care? We are told, indeed, that Mr. COOPER remained at home, because it was supposed that some blood vessel had been perforated by the bayonet. This is a curious and novel excuse. An injury, comparatively slight, would then, it appears, have been immediately attended to by the senior surgeon, while attendance on the more grave and dangerous accident was deferred to the morrow. In private practice the more serious and complicated the lesion, the more promptly is medical aid demanded and afforded; but in hospital practice the opposite rule seems to prevail, and by a slight extension of this, to us, new principle, it follows, that if a man be carried to *University College Hospital*, labouring under the effects of an injury, which must be necessarily fatal, he shall henceforward receive no surgical assistance at all.

From the version of the case of JAMES CHAPLIN, furnished by Mr. TAYLOE, it would appear that the bayonet had wounded one of the branches of the internal iliac vein, producing considerable effusion of blood into the cavity of the abdomen. The quantity of effused blood was certainly represented to us as having been very much under three or four pints; but even admitting, as we are willing to do, Mr. TAYLOE'S history of the case to be the correct one, this will not excuse Mr. COOPER for not having detected the existence of strangulation of the intestine in the wound, and applying at once the appropriate treatment. The position most favourable to Mr. COOPER, in which the question is placed by this admission is, that if the man had not died of hæmorrhage, he would inevitably have pe-

rished from strangulation of the gut. We leave to the senior surgeon of *University College Hospital*, the full advantage of such an excuse.

We are unwilling to enter further upon this painful subject; there are, however, two points which merit some attention before we draw our observations to a close. Mr. TAYLOR remarks, that if the skin had been divided, and the strangulated bowel pushed back, "the latter would certainly "have been reduced, wounded, into the "abdomen, and the dangers of intestinal "effusion would have been added to that "of great effusion of blood." Assuredly, some people have a very ready and pleasant mode of consoling themselves under misfortune. Who told Mr. COOPER's advocate that it was necessary to *push back* the wounded gut into the abdomen? Besides, there was no evidence whatever, during life, of the intestine having been perforated, a circumstance which is explained by its having become engaged in the wound, and retained there, immediately after the receipt of the injury.

The second point to which we would allude is the probability that if the circumstances attending the death of JAMES CHAPLIN had been investigated before a medical coroner, the case might have assumed a very different aspect from that which it presented under the direction of an individual totally incapable of inquiring into the nature of the various causes which may occasion death, or of distinguishing those causes according to their effects, whether they be physical or presumed. A medical coroner would never have been satisfied with the testimony of Mr. TAYLOR. He would have felt the necessity of demanding explanations from the surgeon by whom the wounded man had been treated, and under whose care he died; a medical coroner would have seized, at once, the important distinction between the immediate and remote cause of death, between the necessary effects of a penetrating wound of the abdomen, and the accidental complication of those effects by the introduction of a piece of intestine between the edges of the wound, where it became compressed and strangulated. All these are points which are intimately connected with an elucidation of the true cause of death, and if the latter be, as we believe it to be, the main duty of a coroner, then is it evident that none but a medical man can fulfil the difficult and important duties of a coroner in an efficient manner. We can readily conceive that, to an attorney-coroner, or other "layman," the death of JAMES CHAPLIN would seem a simple affair, and one not meriting a single medico-legal question; but we can imagine, on the other hand, a medical coroner addressing the following questions to the senior surgeon of *University College Hospital*:—

When did you first see the patient?

At that time how many hours had he been in the hospital?

In penetrating wounds of the abdomen, what immediate lesions have you to fear?

Is no other accident likely to complicate the injury, beside hæmorrhage and perforation of the gut?

Have you ever heard of the intestine becoming strangulated in such wounds?

Is it an unfrequent occurrence in penetrating wounds of the abdomen, and one for which a surgeon of experience is prepared?

What are the symptoms of strangulation of the intestine, under the circumstances alluded to? Did not these symptoms exist in the case of JAMES CHAPLIN?

To what, then, do you attribute the constant vomiting all night? Would mere effusion of blood have produced constant vomiting and constipation?

Suppose the strangulation to have been discovered, what practice should have been adopted, and what would have been the probable effect, on the supposition that no effusion of blood existed?

Penetrating wounds of the abdomen are not, then, necessarily mortal?

But might not accidents afterwards arise which, if not discovered by the surgeon, or

promptly remedied, would inevitably produce death?

We shall not pursue these interrogatories farther. More questions have already been asked than Mr. Cooper would, probably, find it either agreeable or convenient to answer; but, the time must soon arrive, when, under a proper order of things, such questions will be asked, and when surgeons will be compelled to answer them.

We can only offer our sincere wishes for the quick advent of such a period; under the present mismanagement of our public medical charities, these establishments, instead of being receptacles for the relief of the indigent sick, are daily converted into places whence the departure of the poor, from this life, is rendered as rapid as possible, and instead of exhibiting the noble inscription—"Hospitium," their walls should bear the line traced by the hand of the poet over the gates of "l'inferno," "Lasciate ogni speranza, voi che 'ntrate."

We have received several additional communications on the Assurance Office Fees question. In a future number we will extract those portions of them which the writers seem to deem the strong parts of the argument, and append a few remarks of our own. One correspondent draws our attention to a statement in one of the periodicals which represents us as asserting that medical practitioners should not be paid for their medical certificates. If such a statement have been made, the publication in question contains a falsehood. We insisted that the medical referee of the assured party is unquestionably entitled to a fee for his certificate, but we insisted, at the same time, that he could have, and ought to have, no legitimate claim on the Assurance Office for such a demand.

The Cyclopædia of Practical Surgery, comprising a Series of Original Dissertations on Operative Medicine. By An Association of Physicians and Surgeons. *Edited by* W. B. Costello, M.D. London: Sherwood and Co.

The success of the "Cyclopædia of Practical Medicine," suggested, without doubt, to Messrs. Sherwood and Co., the expediency of publishing an analogous work, to be named the "Cyclopædia of Practical Surgery." An able editor was selected in the person of Mr. Costello, and the assistance of some of the first surgeons, both in this country and on the Continent, was obtained towards the completion of the work. Indeed, if great names be a guarantee for great performances, the "Cyclopædia of Surgery" promises to take rank with any of its scientific rivals, for, amongst the list of contributors, we observe the names of Sir A. Cooper, Sir B. Brodie, Mr. Earle, Dr. Elliotson; Messrs. Harrison, Carmichael, and Crampton, of Dublin; Messrs. Knox and Lizars, of Edinburgh; Mr. Liston, of the *North London Hospital*; Mr. Wardrop, Mr. Wallace, &c.; and, amongst the list of foreign surgeons, we find enumerated M. Jules Cloquet, M. Dieffenbach, M. Malgaine, and M. Velpeau.

The above list certainly comprises many of the best names of the day, and we trust that a work will at length appear to which we may look with some degree of pride, and which we shall hereafter be enabled to cite as a national production. The difficulty of conducting a work of this kind to its completion is very great, and no matter how industrious or capable the editor may be, he will fail, unless efficiently seconded by industry on the part of the gentlemen who have undertaken to act as contributors; talent these latter do not want, but as many of them enjoy very extensive private practice, we cannot avoid urging on them the necessity of assuming some of the literary habits of their continental brethren, and devoting some few hours towards completing, efficiently, the "Cyclopædia of Practical Surgery."

The principal articles in the two first numbers, now before us, are, Amputation and Adhesion, by the editor; Amaurosis, by Mr. Tyrrel; Aneurysm, by Mr. Wardrop; and Morbid Anatomy, by Dr. Hodgkin.

The article, "Adhesion," affords a good

specimen of what we may call the theoretical portion of the work. It contains a well-digested account of the curative effects of adhesive inflammation, and of its extensive applications in surgery. The article, "Amputation," in the second number, may be cited as an example of the practical division of the "Cyclopædia." It was originally entrusted to the care of Mr. King, but some occurrence having, as we understand, prevented that gentleman from terminating it, the article was completed by the editor.

The subject of amputation involves some of the most important points connected with the history of surgery; it also embraces a great variety and multiplicity of facts; we were hence led to expect a carefully digested, practical, and, at the same time, learned article, under the head "Amputation;" we are gratified in being able to say that our expectations have not been disappointed. A short sketch of the manner in which this article has been written, will, perhaps, enable our readers to form some judgment concerning it, and from it to estimate the value of the whole work.

After a few remarks on the history of amputations, the authors pass at once to certain considerations which apply to all methods of amputating, and to all amputations taken in the aggregate; these, to prevent repetitions, are first noticed, and amongst them, the most important point is, "A Consideration of the Cases in which Amputation ought to be performed."

"They are as follows:—Malignant diseases, such as the various forms of cancer; some tumours not malignant; mortification; caries; certain of the severest forms of necrosis; white swellings; extensive suppuration, with or without ulceration; fractures; dislocations, and wounds."

Under each of these heads we find some pertinent and, for the most part, practical remarks, in which the opinions and method of treatment of foreign surgeons are compared or contrasted with the practice of our own. This division is followed by a description of what may be called the "General Methods of Amputation." They are three in number, and are usually termed the circular method,—the oblique or oval method,—and the flap amputation. The various subjects connected with each of those methods are here fully discussed; for example, under the head of "Circular Method" the authors first describe the most commonly approved manner of performing the circular amputation; they then describe, in successive sections, the plans of Celsus; of Paré; of Cheselden and Petit; of B. Bell; of Alanson; of Le Dran and Louis; of Dessault; of Dupuytren;—examine what is good and what is bad in each of those plans, compare them with one another, and endeavour to arrive at sound and permanent principles of practice.

The description of the three general methods is followed by an account of the means necessary to arrest the bleeding after amputation; of the care after amputations; of the accidents which may arise during the operation; of the removal of the first dressings, &c. The effects of inflammation of the stump are next described; the real cause of conical stump pointed out; and, finally, the questions of phlebitis, and of the constitutional effects of amputation are discussed.

The greater part of the points just enumerated are treated in a masterly manner; but we regret to say that the questions of phlebitis, and of the secondary consequences of the removal of limbs, are dismissed without having received that share of attention which their importance demanded.

A description of the particular amputations naturally follows that of the general methods. Here the value of the descriptive remarks made by the authors is very considerably increased by a number of woodcuts (no less than forty-seven), which illustrate the method of performing the different amputations, the appearance of the stumps, the precise direction of the first incisions, and various other particulars, more advantageously than any mere description, however minute and accurate, could have done. This article is as complete a one of the kind as could have been written, and any little defects which it may contain are amply counterbalanced by the abundance of sound practical information to be met with in every page.

At the close of the second number we observe the commencement of an article on Aneurysm, by Mr. Wardrop. If this gentleman will only take the trouble of conveying all the information which he must possess upon this particular point of surgery, we may expect a rich accession to our knowledge. We regret that our space does not

admit of a more extended notice of the "Cyclopædia of Practical Surgery;" we should have wished to have entered more fully into several of the articles which the two numbers now before us contain; we must, therefore, conclude by expressing a hope that the work will be continued with the same spirit with which it has been commenced, and by recommending it strongly to the notice of our readers.

The "Cyclopædia of Practical Surgery" promises to be a more successful undertaking than its rival of "Practical Medicine;" not, perhaps, because the former will be conducted with more talent than has been the latter, but because the branch of medical science called surgery, admits more easily of the production of an homogeneous work by a variety of individuals, than does the branch denominated medicine.

LINNEAN SOCIETY.

THE first ordinary meeting of the ensuing session was held on Tuesday, November 7, EDWARD FORSTER, Esq., V. P., in the chair. Among the presents exhibited were, the rare fern *cystopteris alpinia*, collected in Essex, by Mr. Pamplin, and several specimens of *cantharides* hitherto unknown in England. A note was read from Prince Lucien Buonaparte, on certain turtles and vertebrated animals found by the author in Mexico; after which the Secretary proceeded to read a paper from Dr Hancock, on the tree which yields the Angustura bark. The subject had been long considered as very obscure, until Willdenow, under the name of "Bonplandia trifoliata," described a plant, from specimens and notes, sent by Humboldt, from Cumana, where this celebrated traveller believed he had identified it in a large tree, called there *Cusparia*. But Dr. H. having had opportunities of examining many of the trees in flower, and bearing fruit, at Carony, found its botanical characters to differ much from those of Bonplandia. He considered it to be a distinct species, and as such described it in the "Medico-Botanical Transactions," under the appellation of *Galipea officinalis*,—the genus to which it belongs, *Galipea*, having been previously established by Aublet, and adopted by Decandolle. The leaves appear to be very similar in the two plants, but some essential differences were pointed out in the flowers. It is a singular coincidence that the Angustura bark has been used by the natives to intoxicate fish, in the manner mentioned by Dr. Saunders, of the Cinchonas. The paper was drawn up to obviate some doubts which had been suggested as to the disparity of the two assumed species.

CASE OF

HYPERTROPHY OF THE HEART

IN A

CHILD FOUR YEARS OF AGE.

To the Editor of THE LANCET.

SIR:—I send you the following case of disease of the heart, and should you consider it of sufficient interest to deserve a place in your valuable Journal, an early insertion will oblige.

My statement respecting the symptoms and treatment is probably deficient in some respects, as I had no opportunity for personal observation during the lifetime of the patient, my services not having been requested till a short time before death. I have every reason, however, to believe it is perfectly correct, and under that impression I forward it to you with confidence. I am, Sir, yours obediently,

HENRY W. SANDELL, M.R.C.S.L.

29, Chichester-place, Gray's-inn-road.
Nov. 7th, 1837.

On Sunday evening, September 17, William Clarke, ætat. four years, of fair complexion, and rather strumous habit of body, was seized with severe pain in the pit of the stomach, and oppression across the middle of the chest, accompanied with slight dyspnœa, and inability to lie down.

The following Tuesday, being much worse, he was taken to *St. Bartholomew's Hospital*, but no relief was obtained from the medicine that was administered, which I believe was of an aperient character. As the child was not admitted, his mother took him a second time, on Thursday, on which day œdematous swellings of the upper and lower extremities commenced, and increased in a few hours to a frightful magnitude. The dyspnœa also increased to such a degree that he was obliged to be supported in an erect position, day and night. Towards the evening there was a trifling cough.

The day after, and the following Monday, there being no amendment in the symptoms, he was taken to the hospital again, but without any good effect. He died the next day.

This is the history of the case, which I received from the mother, immediately on my arrival. The suddenness of the attack, and severity of the symptoms, together with their fatal termination in so short a time, led me to conceive that something of an unusual nature must have existed during life to have caused these phenomena. I therefore, without any delay, strongly recommended that an examination should be made, which was agreed to.

Autopsy thirty hours after death.—The body was in good condition, the fat cover-

ing the ribs and abdominal muscles being full half an inch in thickness. There existed a considerable disproportion in the form of the thorax, the upper part being exceedingly narrow, but the middle and lower parts capacious.

Chest.—On raising the sternum, the pleuræ were filled to an incredible degree with clear serum, of a pale straw-colour, and appeared like two large bladders, in a state of complete distention, lying lengthways in the cavity of the chest. The lungs were collapsed, and (with the exception of the right, which was slightly œdematous), very healthy. They were not adherent in any part to the costal pleuræ.

Heart.—This, and the pericardium, occupied a considerable space in the thorax, and descended so low as to form, from their pressure upon the diaphragm, quite a large tumour in the abdomen. The latter was also distended with serum. It contained full ten ounces. The heart was enormously enlarged, equal in size to an adult's, the upper part of its base reaching as high as the sixth dorsal vertebræ, and its apex as low as the inferior edge of the sixth rib. Its position also varied, lying more perpendicularly than usual, and projecting a little into the right side. This increase in size did not depend upon any distention of its cavities, but from thickening of its substance. On opening the right auricle (which I did very carefully, making the first incision transversely across its front part, into the appendix, and the second from the middle of this, directly upwards, through the anterior side of the auricle, towards the vena cava superior), a large lump of solid fat,* irregular in shape, presented itself, lying right before the orifice of the vena cava superior, and partially over that of the inferior. One end of it was attached to the musculi pectinati, and the other hanging loose. The cavity was completely filled with black blood, which was so adhesive that great force was required to remove it. In the right ventricle there was another piece of fat, entirely blocking up the opening of the pulmonary artery, and occupying full three parts of the cavity. I could not detect any appearance of disease, either in the artery or its valves.

The left side of the heart was perfectly natural, and quite free from blood. There was considerable enlargement of the coronary vessels.

The liver and spleen were gorged with blood.

There was no other pathological phenomenon worthy of notice in any part of the body.

* We imagine that our correspondent has taken for fat a portion of very concrete fibrine.—Ed. L.

SUCCESSFUL CASE OF LITHOTRITY.

To the Editor of The Lancet.

Sir:—If you consider sufficiently interesting the following successful case of lithotrity, accompanied by most discouraging symptoms, you would oblige me by affording it space in an early number of The Lancet. I am, Sir, yours very respectfully,

William Jeaffreson,
Surgeon.

Framlingham, Nov. 6, 1837.

In June, 1836, my advice was asked by Joshua Johnson, of this parish, labourer, aged 38. He had suffered symptoms of stone, accompanied by occasional rather profuse discharges of blood with his urine for several years. On introducing a catheter, for the purpose of injecting the bladder, the urethra was much less yielding than usual, and the lining membrane of the bladder appeared so spongy and disposed to bleed on the slightest touch of the instrument, that I had the greatest difficulty in detecting calculus. Having done so, I earnestly advised him to submit to lithotomy; but, having lost an uncle many years before from that operation, he could not make up his mind. On the 23rd of August he entreated me to try what could be done by the new operation; therefore, having injected the bladder, and distinctly felt the stone, I introduced the percussor, seized and crushed it, in what I believed to be its long diameter, as it gave me the sensation of being a flat oval. He experienced so much relief that he called on the 25th, and requested another sitting, bringing more than 3i. of detritus. Complying with his request, I was able to crush four fragments, and to repeat this every now and then, till he had submitted to nine sittings. On the 21st of September I could find no more stone, and he had obtained complete relief from all suffering.

The most singular circumstance in this case was, that he never, after the stone had been once broken up, had hæmorrhage of consequence. He has for many months resumed the occupations of health, and has been able to do the regular harvest-work of this year, without any return of his complaint. The weight of detritus removed was 3iij. grs. x.

ON THE ALLEGED ULCERATION OF THE GLANDS OF PEYER IN TYPHUS.

To the Editor of The Lancet.

Sir:—In common with every member of the profession, my thanks are due to you for making public the admirable lectures of Dr. Marshall Hall. Upon one point, however, I have presumed to form a different

opinion, and, as it is a pathological one, submit it to your judgment.

In his first lecture he mentions the deduction which M. Louis has been enabled to draw from the observation of a great number of cases; viz., that true typhus is always accompanied by ulceration of the glands of Peyer, and that in "enterite" these glands are free from specific disease.

It is dangerous, and will be considered arrogant to entertain a different opinion, or enter the field against two such distinguished pathologists; but deductions admitting, as here, of few or any exceptions, are most difficult to be drawn, and when drawn, are not worth much; they are apt to mislead, or at least to satisfy the mind that no further inquiry is required or, indeed, to be admitted.

These glands are very prominent in the young subject; and, probably, in every child examined they would present an appearance similar to that insisted on by M. Louis in typhus; in the adult, they are not so apparent, unless the patient has suffered a lingering illness, and is generally emaciated; then they will be found in slightly elevated semilunar patches, and, examined with a common lens, the orifices of the excretory ducts are quite conspicuous, and give the surface a ragged uneven appearance. This elevation is accounted for by the atrophy of the submucous cellular tissue, bringing the mucous into closer adaptation with the muscular coat of the gut, and not from any specific disease of the gland.

There is nothing so mysterious in the action of this congeries of glands as to make us look upon their ulceration as pathognomonic of due disease. I have no doubt that this appearance, termed ulceration by M. Louis, is found in typhus, as it will be found in many other diseases; but it must be remembered that typhus is generally a lingering disease; we have no evidence of it, in the rapidly-fatal fevers of warm climates; but I can add, from the experience of more than 200 cases, that the same appearance will be nearly invariably observed in Asiatic cholera, and in this there is rapid atrophy of the body generally, but more particularly of the alimentary canal.

DELTA.

Chelsea, Saturday morning.

MR. WOOD ON MESMERISM AT THE UNIVERSITY COLLEGE HOSPITAL.

To the Editor of THE LANCET.

SIR:—It is with reluctance that, after so short an interval, I again address you on the subject of mesmerism, the more so as the observations I am about to make must necessarily partake somewhat of the spirit of controversy, which, I apprehend, is not likely to assist us materially in coming to a correct conclusion, and establishing the truth of the existence or non-existence of mesmerism. This, and not its indiscriminate advocacy, is my object.

The "Eye-witness" mistakes me in supposing that I am offended with him for entertaining or expressing his own opinion,—he has an undoubted right to do this; but, surely, Sir, when an individual undertakes to express his opinion publicly, he ought to be extremely cautious how he "forgets the exact statement" of another, for the purpose of strengthening his own views. The statement of Dr. Elliotson was in print, and consequently the plea of forgetfulness becomes but a very feeble one. Was it not incumbent on the "Eye-witness" to satisfy himself on this point before misrepresenting the observations of one whose opinion must have great weight with those who, not having the opportunity of seeing and judging for themselves, depended on the impartial and faithful representations of others? To correct this misstatement was one of my principal objects in addressing you on a former occasion.

I am much surprised at your correspondent saying that my conclusions do not differ materially from his own. Now, I conceive, that they widely and totally differ, at least as far as I am able to comprehend his observations. In his former communication he says nothing has been adduced to prove that mesmerism is not a fallacy. How he is able to reconcile this statement with the results of experiments which I have related, I cannot conceive. It appears to me that it can only be attributed to a change in his opinions since he wrote his first letter. The next charge is, that I do not controvert one of the facts which he has adduced. My answer to this is, that in the first place, I was myself absent from town during the greater part of the time in which the experiments alluded to were performed; and, in the next place, upon very careful examination, I cannot find that any other fact has been brought forward by the "Eye-witness" than this, that in the majority of male patients little or no effect was produced by mesmerism. I have no hesitation in admitting that in many no effect was produced, and in more very slight effects were produced; but, at the same time, I submit that one positive experiment (if we can prove that it really is such, which I think I have already done) proves more in favour of mesmerism than a dozen negative ones do against it. Upon the whole, this charge, I think, applies with greater justice and force to the "Eye-witness" than to myself. Has he controverted one of what I think I may fairly call facts, which I have brought forward? or does he still think that imagi-

nation or constrained position have had influence in producing them? With respect to Rebecca, I am aware that she applied to the hospital in consequence of having heard that M. Dupotet had the power of curing epilepsy, and for this purpose she was anxious to submit to his experiments; but, if I may judge from the questions which she put to me, I should say that she was totally ignorant of what was to be done; again, one would not suppose that a young woman, appearing for the first time before an assemblage of gentlemen, would have presence of mind at once to commence practising a deception, for the effects were manifested before she could have had time to compose herself, and consider what was to be expected from her. But I would not place much reliance on this case. It appears to me that we should not confine our observations to the experiments of M. Dupotet alone. Supposing that nothing has been proved by these, does it therefore follow that we should rest satisfied without carrying the inquiry further? I think not. Since my former communication still more remarkable effects have been produced on the patient who is the subject of ecstatic delirium; but I forbear to mention them at present, until they have been repeated and varied in such a manner as to leave no doubt of their accuracy. I remain, Sir, your obedient servant,

WILLIAM WOOD.

University College Hospital,
Nov. 6, 1837.

TREATMENT OF THE SICK-POOR UNDER THE UNION MEDICAL CONTRACT SYSTEM.

To the Editor of THE LANCET.

SIR:—Your valuable publication having recently fallen under my notice, I was very forcibly struck with the truth of your observations respecting union medical contracts, and their tendency to deprive the poor of this kingdom of efficient medical attendance in the hour of sickness; and, as it may *interest* the advocates of the "cheap" system to have evidence laid before them respecting its practical results, I beg to forward to you the two following cases, which I have selected out of many others which have recently come under my own immediate observation. I am, Sir, your obedient servant,

HUMANITAS.

Kington, Hereford, Nov. 2nd, 1837.

CASE 1.—William Prothero, 57 years of age, of the parish of Kington, labourer, has been subject to a double inguinal hernia for the last eight years, but had always been able to return the bowel into the abdomen without difficulty. On the 27th of March last the rupture came down in a greater degree than usual, and after experiencing considerable pain, and endeavouring in vain to return it, he made application for assistance to the medical officer of the union, who soon after attended, and the result of whose visit will be best seen in the man's own words, in reply to the following questions:—

"When the doctor came to you were you in bed?"—"Yes."

"What did he do for you?"—"Nothing."

"What did he say to you?"—"He said he could do nothing that could do me any good, but that I might put some ice to it."

"Did he feel it, or endeavour to reduce it?"—"No, he did not even put his hand on me."

"Did he direct any one else to try and reduce it?"—"Yes, he told my wife that she was to try and knead it up with her hands."

"Did she do so?"—"No, she was afraid of hurting me, and he did not show her how."

"When did he see you again?"—"*He came again in six days.*"

"What was done for you?"—"Nothing at all."

"Did he feel the swelling?"—"No, he never put his hand on me."

"Did he give you any medicine?"—"Yes, three pills."

"Did they act on your bowels?"—"No, I vomited them almost directly."

"Did you vomit much all this time?"—"Yes, I vomited everything I took."

"Was anything done for you on that occasion?"—"Nothing; but I heard him tell my wife that I should soon die."

"What took place afterwards?"—"He came to see me now and then, but he did not do anything for me."

"You continued much the same, did you?"—"No, the swelling burst."

"When was this?"—"Just three weeks after it happened."

"Before this took place did your bowels act?"—"Not once."

"Did they after the swelling burst?"—"No, everything came out through the opening."

"Did the doctor see you regularly all this time?"—"No."

"How often did he see you?"—"Once in two or three weeks, may be, but sometimes it was longer."

"What was the longest time he was absent from you during any period of your illness?"—"*Seven weeks.*"

"Seven weeks, are you sure of this?"—Yes, I can swear to it, and so can my wife and the others who were here at the time."

"Have you anything else particular to tell me?"—"Why, only that when I asked him to bring some other doctor to see me, he said he shouldn't do it, as he could do all that could be done himself."

The man continued in a state of great emaciation for a considerable time, necessity imposing upon him a very spare diet, and no means being taken by his medical attendant to supply him with anything beyond the two shillings and sixpence per week, and the bread allowed by the union. Everything that he took continued for some weeks to pass through the opening, but upon persevering in the use of lavements his bowels at length acted partially in the natural way. At the same time, it may be observed, that the use of lavements was left to be suggested by a non-professional individual who casually visited him.

Such is the treatment which this poor fellow has received under this union medical contractor, and but for the kind suggestions of those medical gentlemen who had visited him from time to time, from motives of curiosity, as well as from feelings of compassion, he must have been lost; and it is only to be regretted that the latter were not aware of the case at a time when efficient relief might have been afforded to him. It may be added, that *no means* have been taken, even to the present time, to accelerate the closing of the fistulous openings, and there he remains in just the same state as he has been in for the last twelve weeks,—the gentlemen in the neighbourhood, who are competent to undertake the case, declining to interfere, as their interference would cause the man's pay to be withdrawn by the guardians.

[This statement refers to what has taken place between the 27th of March and the last month.]

Case 2.—William Abbot, of Woodbrook, in the parish of Kington, labourer, on the 24th of December last received a severe wound on the back of his right hand, from getting it entangled in the wheel of a timber carriage, the whole of the integument being torn off, and the hand otherwise frightfully bruised and lacerated. He went immediately to the medical officer of the union who sewed up some part of the wound, and dressed it, telling the man to come again on the next day but one. The man went as directed, and was told that the part was "going on well, and that it need not be undone," and he was desired to come again in two days. At the expiration of the two days he kept his appointment, stating that his arm was much swollen, and that his hand was exceedingly painful, to which the only reply he obtained was, "What would you have said if it had been as big as your body?" He requested to have it dressed, but could not prevail on the medical officer to accede, and he was compelled to return to his home as he left it. On the seventh day after the accident he went again, and represented the very painful condition of the wound, pointing out that matter was oozing from beneath the bandage in every direction, and that it was so offensive that his wife could not bear him in the house. The only reply which he received was, "Well, I cannot attend to you now," and he was at length compelled to get it dressed elsewhere as well as he could.

The man was laid up, however, *nine* weeks with the injury, and when he had been at his work *three* weeks this humane individual called, *for the first time*, to inquire "*what had become of him?*"

[*.* The foregoing statements have been authenticated by the writer in a private note to the Editor.]

DUBLIN COLLEGE OF SURGEONS.

To the Editor of The Lancet.

Sir:—As a letter signed "A Licentiate," published in your last number, contains, amongst other strictures, an allusion to a recent regulation of the *Dublin College of Surgeons*, which may be misunderstood by those most interested in the matter, "the class of Irish students," may I beg your insertion of the following explanation. It is true that the College have virtually refused the *lectures* as delivered by the master of the chartered *Dublin Lying-in Hospital*, by requiring of candidates for their licence, attendance on a course of lectures on midwifery, delivered in a medical or surgical school, to meet which bye-law the pupils attending this Institution are *free* to my late assistant, Dr. Murphy's, lectures, to be delivered in the adjoining school, Marlborough-street. They have not, however, disfranchised the *Dublin Lying-in Hospital*; on the contrary, they have rendered attendance on practical midwifery, either in it, or in some other of the institutions which are recognised by their body, imperative, in future, on such as may be candidates for their licence. I am, Sir, your obedient servant,

Evory Kennedy, Master,
Dublin Lying-in Hospital.

Nov. 13, 1837.

SPECIMEN OF MEDICAL APPOINTMENTS IN THE NEW UNIONS.

To the Editor of The Lancet.

Sir:—If the following statement will be of any service in procuring redress of medical grievances from boards of guardians, you are at liberty to make what use you please of it; we pledge ourselves to prove its truth.

The Linton Union is divided into three

districts, one of which (the Balsham) contains an agricultural population of 3614, more than two-thirds of whom are paupers during illness. This our father and ourselves have attended for fifty years, with the exception of one parish. At the beginning of September the Guardians advertised for tenders, and we offered to find all the paupers every species of surgical and medical aid, with the exception of midwifery and trusses, for 90*l.* per annum. Our tender was the only one sent in, yet it was rejected, and a person employed who has been a resident in this neighbourhood but a short time, *does not live in the district, has also the care of the Linton district, and who thus has to attend fifteen parishes, the united population of which is* 7902. During our attendance there was no complaint made against us, so that it is perfectly clear that the only reason of our dismissal was to save the paltry sum of 15*l.*, which is the difference between our tender, and what Mr. Howard receives. He has to pass our doors to visit most of the parishes, one of which is eight miles from his house. We remain, Sir, yours, &c.

JOHN PRINCE,
THOMAS PRINCE.

Balsham, Cambridgeshire,
Nov. 11, 1837.

THE CHOLERA IN AFRICA.

THE cholera has just broken out in the *Dey's Hospital* at Algiers. On the 14th of October 17 cases, 9 deaths were reported. At Bona, where the epidemic has been prevailing for some time, the number of cases on the 17th October had amounted to 328, the deaths to 180. One of the most curious points in the history of the Asiatic cholera is, perhaps, the steady proportion of deaths to cases which may be observed to have occurred in all parts of the world, and in all climates. This fact proves how very little has as yet been done in the treatment of the disease.

M. DONNÉ, who has lately paid considerable attention to the composition of the human fluids, thus expresses the composition of milk :—

"Milk is a fluid holding in solution lactic sugar, salts, a small quantity of fatty matter, and of caseum; and, in suspension, a number of globules composed of butter, which are of various sizes, and soluble in ether.

"The first milk, or *colostrum*, contains, in addition, particular bodies, which M. Donné designates "granular;" these latter do not disappear entirely before the end of the first month after delivery: they sometimes, however, continue beyond that time. In cases of abscess of the mammæ, the milk sometimes contains pus, and may contain blood."—*French Lancet*

AUTOPSY OF GENERAL DAMREMONT.

THE Comte de Damremont was killed by a cannon-ball at the seige of Constantine, in October last. The report of the post-mortem examination of the body states, that on the left side of the body, above the last false rib, there appeared a large open wound, about seven inches across, which gave exit to a considerable portion of epiploon, and a mass of large intestine, which was torn across. The stomach was also perforated by the ball, which latter had passed through the diaphragm, and base of the lungs, and then made its exit at the region of the back, having broken into minute fragments the 9th, 10th, and 11th vertebræ. The wound at this side of the body presented a cutaneous opening five inches in length.—*French Lancet*, Oct. 28th, 1837.

TO CORRESPONDENTS.

Tyro omitted to give the particulars of the examination to which he has made reference in his letter.

Unfortunately, in the instance to which *A Student* has adverted, he has formed an erroneous impression.

We have received a letter from *A Subscriber*, in defence of the late proceedings at the *Westminster Hospital*. We ask our correspondent, Is it our fault if the hospital cannot afford more leeches? As to the surgical treatment of ruptured urethra, we are as well conversant with it as our correspondent.

Communications have been received from *H. S. P.*, from *Dr. Sorley*, *Mr. Selwyn*, and *J. T.*

On the subject of the communication of *J. T.*, a strong remonstrance should be made to the party concerned; should this fail, recourse may then be had to publicity.

Mr. GIBSON, of Glasgow, has communicated to us a case of Asiatic cholera, which occurred in that city on the 26th of August last. It was successfully treated by him with stimulants, and full doses of calomel and opium. Want of space prevents us from inserting the case in full.

Several communications, reports, and papers, are unavoidably postponed. Among them are a lecture by Dr. Wallace, with engravings, on the Skin of the Negro, and a paper read at the Phrenological Society, by Dr. Elliotson, entitled, "On the Ignorance of the Discoveries of Gall, evinced by recent Physiological Writers." Also, hospital reports, and several letters.

NOVEL AND BOLD TREATMENT IN APOPLEXY.—In a Manual just published for Apothecaries' Hall, by a learned member of the College of Surgeons, we find it gravely recommended, in cases of apoplexy, to bleed from the jugular vein, and *carotid artery!*